

Does the market forecast business?

(Page 154)

BUSINESS WEEK

A McGRAW-HILL PUBLICATION

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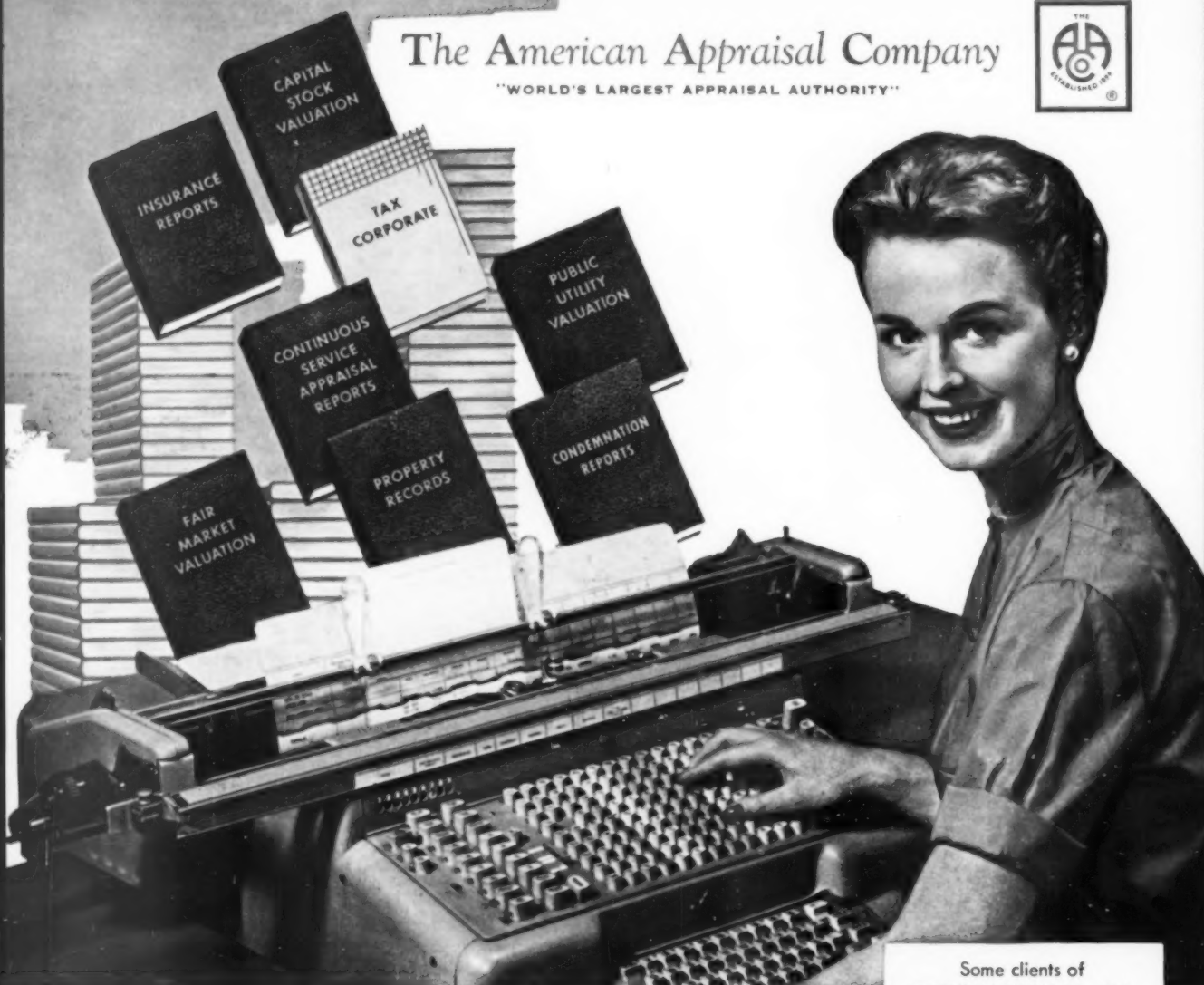
APRIL 26, 1958

U. S. Merchant Marine: Overhauling
its fleet means a 20-year job
for shipbuilders. (Production)

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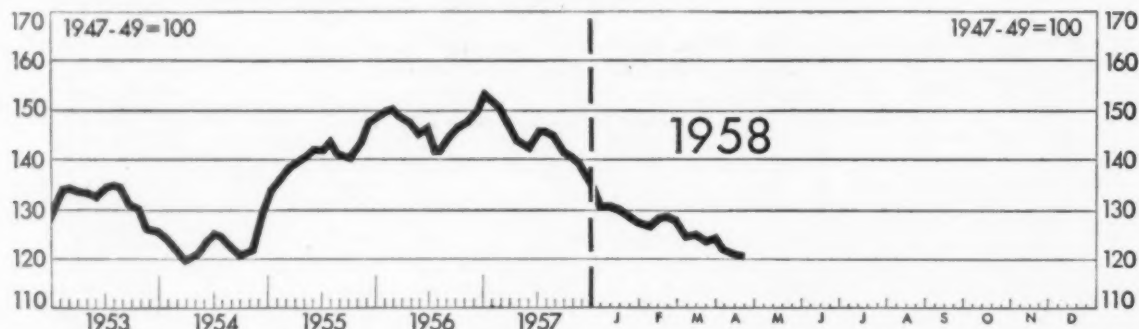
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FIGURES OF THE WEEK



BUSINESS WEEK INDEX (chart)

1946 Average	Year Ago	Month Ago	Week Ago	5 Latest Week
91.6	144.8	124.6	†121.7	*121.2

PRODUCTION

Steel ingot (thous. of tons).....	1,281	2,269	1,366	†1,285	1,265
Automobiles and trucks.....	62,880	151,357	104,928	†110,663	99,984
Engineering const. awards (Eng. News-Rec. 4-wk daily av. in thous.).....	\$17,083	\$60,838	\$58,237	\$67,950	\$65,971
Electric power (millions of kilowatt-hours).....	4,238	11,485	11,756	11,307	11,107
Crude oil and condensate (daily av., thous. of bbls.).....	4,751	7,551	6,263	6,187	6,251
Bituminous coal (daily av., thous. of tons).....	1,745	1,647	1,273	†1,170	1,160
Paperboard (tons).....	167,269	282,574	273,800	256,970	263,614

TRADE

Carloadings: mfrs., miscellaneous and l.c.l. (daily av., thous. of cars).....	82	67	55	54	54
Carloadings: all others (daily av., thous. of cars).....	53	45	35	35	33
Department store sales index (1947-49 = 100, not seasonally adjusted).....	90	122	106	125	103
Business failures (Dun & Bradstreet, number).....	22	302	357	342	346

PRICES

Spot commodities, daily index (Moody's, Dec. 31, 1931 = 100).....	311.9	407.6	399.2	394.7	392.0
Industrial raw materials, daily index (BLS, 1947-49 = 100).....	††73.2	93.6	82.6	80.8	80.6
Foodstuffs, daily index (BLS, 1947-49 = 100).....	††75.4	82.6	89.7	90.1	90.3
Print cloth (spot and nearby, yd.).....	17.5¢	17.9¢	17.3¢	17.2¢	17.1¢
Finished steel, index (BLS, 1947-49 = 100).....	††76.4	174.0	181.6	181.6	181.6
Scrap steel composite (Iron Age, ton).....	\$20.27	\$42.17	\$35.00	\$32.83	\$31.83
Copper (electrolytic, delivered price, E & MJ, lb.).....	14.045¢	31.915¢	24.570¢	24.835¢	24.270¢
Wheat (No. 2, hard and dark hard winter, Kansas City, bu.).....	\$1.97	\$2.37	\$2.30	\$2.30	\$2.29
Cotton, daily price (middling, 1 in., 14 designated markets, lb.).....	**30.56¢	33.88¢	34.56¢	34.58¢	34.60¢
Wool tops (Boston, lb.).....	\$1.51	\$2.10	\$1.70	\$1.65	\$1.65

FINANCE

500 stocks composite, price index (S&P's, 1941-43 = 10).....	17.08	45.57	42.37	41.99	42.70
Medium grade corporate bond yield (Baa issues, Moody's).....	3.05%	4.45%	4.69%	4.66%	4.66%
Prime commercial paper, 4 to 6 months, N. Y. City (prevailing rate).....	¾-1%	3% %	2% %	2%	1% %

BANKING (Millions of Dollars)

Demand deposits adjusted, reporting member banks.....	††45,820	56,588	55,243	55,251	56,491
Total loans and investments, reporting member banks.....	††71,916	87,268	90,474	89,834	92,713
Commercial and agricultural loans, reporting member banks.....	††9,299	31,524	31,041	30,668	30,662
U. S. gov't guaranteed obligations held, reporting member banks.....	††49,879	26,258	28,255	28,055	30,164
Total federal reserve credit outstanding.....	23,888	25,520	24,638	24,638	24,701

MONTHLY FIGURES OF THE WEEK

	1946 Average	Year Ago	Month Ago	Latest Month
Cost of living (U. S. Dept. of Labor BLS, 1947-49 = 100).....	83.4	118.9	122.5	123.3
Wholesale prices (U. S. Dept of Labor BLS, 1947-49 = 100).....	78.7	116.9	119.0	119.7
McGraw-Hill Indexes of New Orders (1950 = 100)				
New orders for machinery, except electrical (seasonally adjusted).....	N.A.	142	120	119
Construction & mining machinery.....	N.A.	177	132	153
Engines & turbines.....	N.A.	151	108	118
Pumps & compressors.....	N.A.	200	203	189
Metalworking machinery.....	N.A.	157	89	93
Other industrial machinery.....	N.A.	149	119	127
Office equipment.....	N.A.	179	147	170
New contracts for industrial building.....	N.A.	144	98	89

* Preliminary, week ended April 19, 1958.
† Revised.

†† Estimate.
** Ten designated markets, middling ½ in.

‡ Date for 'Latest Week' on each series on request.
N.A.—not available at press time.

THE PICTURES—Cover—Herb Kratoch; 27—(top lt.) W. W., (top rt.) Harris & Ewing, (bot. rt.) Robert Phillips, (bot. rt.) Bell and Howell Co.; 32, 33—Grant Compton; 34—Burns Photograph; 36—Curt Gunther; 66, 67—Herb Kratoch; 74, 75, 76, 77—Noel Clark; 120, 121, 122—Herb Kratoch; 128—R. G. LeTourneau, Inc.

B.F. Goodrich



Photo courtesy Left Fork Fuel Co., Quinwood, W. Va.

Rubber jumps a mile-long mud puddle

B.F. Goodrich improvements in rubber brought extra savings

Problem: At this West Virginia coal mine it was impossible to get coal to the railway spurs in bad weather. Roads became impassable, trucks bogged down in the mud. Rain or snow brought the mine's daily coal production to a stop.

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layers of fabric, the B.F. Goodrich Nyfil cord belt is made with cords, running lengthwise, buried in the rubber. The cords add so much strength that a single belt can now travel distances and carry loads once considered impossible.

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Extra benefits: All B.F. Goodrich belts have other improvements, too, brought by better manufacturing methods—such as making belts under uniform

tension, so that all fibers work together; seamless plies to avoid weak spots; cushioned edges for longer wear; patented layers called "breakers" to stand hard blows; mildew treatment to protect fabric. All these improvements and many others help cut costs through better performance.

Where to buy: Your B.F. Goodrich distributor has full information on the conveyor belts described here. And, as a factory-trained specialist in rubber products, he can answer your questions about all the rubber products B.F. Goodrich makes for industry. B.F. Goodrich Industrial Products Co., Dept. M-336, Akron 18, Ohio.

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BUSINESS WEEK • APRIL 26, 1958 • NUMBER 1495

(with which are combined The Analyst and the Magazine of Business) Published weekly by McGraw-Hill Publishing Company, Inc., James H. McGraw (1860-1948), Founder. **PUBLICATION OFFICE:** 99-129 North Broadway, Albany 1, N. Y. See panel below for directions regarding subscriptions or change of address. **EXECUTIVE, EDITORIAL, CIRCULATION AND ADVERTISING OFFICES:** McGraw-Hill Building, 330 West 42nd Street, N. Y. 36, N. Y. Donald C. McGraw, President; Joseph A. Gerardi, Executive Vice President; L. Keith Goodrich, Vice President and Treasurer; John J. Cooke, Secretary; Nelson Bond, Executive Vice President, Publications Division; Ralph B. Smith, Vice President and Editorial Director; Joseph M. Allen, Vice President and Director of Advertising Sales; A. R. Venezian, Vice President and Circulation Coordinator. Subscriptions to Business Week are solicited only from management men in business and industry. **POSITION AND COMPANY CONNECTION MUST BE INDICATED ON SUBSCRIPTION ORDERS. SEND TO ADDRESS SHOWN IN BOX BELOW.** United States subscription rates for individuals in the field of the publication, \$6 per year; Canada, \$7; other Western Hemisphere countries and the Philippines, \$20; all other countries, \$25. Single copies, 50¢. Second class mail privileges authorized at Albany, N. Y. Printed in U. S. A. Title registered in U. S. Patent Office. © Copyright 1958 by McGraw-Hill Publishing Co., Inc. All rights reserved.

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Company Identification

Dear Sir:

Congratulations on your wonderful article, What's Behind the New Look That U. S. Steel is Sporting [BW—Mar.29'58,p88].

U. S. Steel's management proves its right to leadership in recognizing and acting on one of the most important, yet least understood and developed areas in industry today . . . that of company identification. If the new U. S. Steel Identification Plan captures the spirit contained in Richard Sentner's statement, "The market place for steel is the people," it should prove very successful. . . .

ELIEGEY T. FRASIER

DESIGN FOR INDUSTRY
CHICAGO, ILL.

Wrong Word

Dear Sir:

Please, mister! Haven't we maligned the judiciary enough? In A Way to Recoup Stock Losses [BW—Mar.15'58,p135] you state:

"But, over the long pull, dollar averaging, for those investors who take full and judicial advantage of it will usually show reasonable gains. . . ."

The underlining is mine; the word's yours. Mine would have been judicious.

GEORGE CHAPPARS

WESTINGHOUSE ELECTRIC CORP.
PITTSBURGH, PA.

Tax Cut

Dear Sir:

How should taxes be reduced? Tax reduction would do the most good if the money were spent on large discretionary purchases, for instance, for downpayments on durable goods. Moreover, the tax cut should make a strong impression on consumers.

The 1957 income taxes, rather than the 1958 taxes, should be cut. All taxpayers would then receive a sizable refund at once, instead of finding their take-home pay go up by a few dollars a week or a month. The receipt of a refund check may serve to dramatize the federal anti-recession program. The refund should be calculated in a simple manner from the tax returns filed by April 15 so that people would know even before the arrival of their check how much they would receive.

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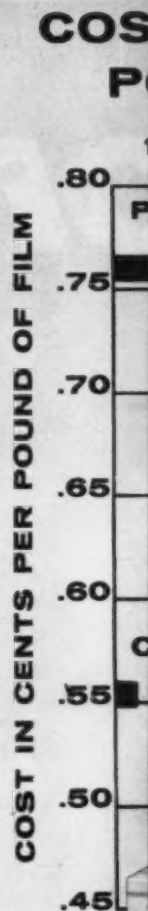
*Based on comparative costs per pound of polyethylene and cellophane and the square inches of film of identical thickness that a pound of each yields.

It pays to package in film made of

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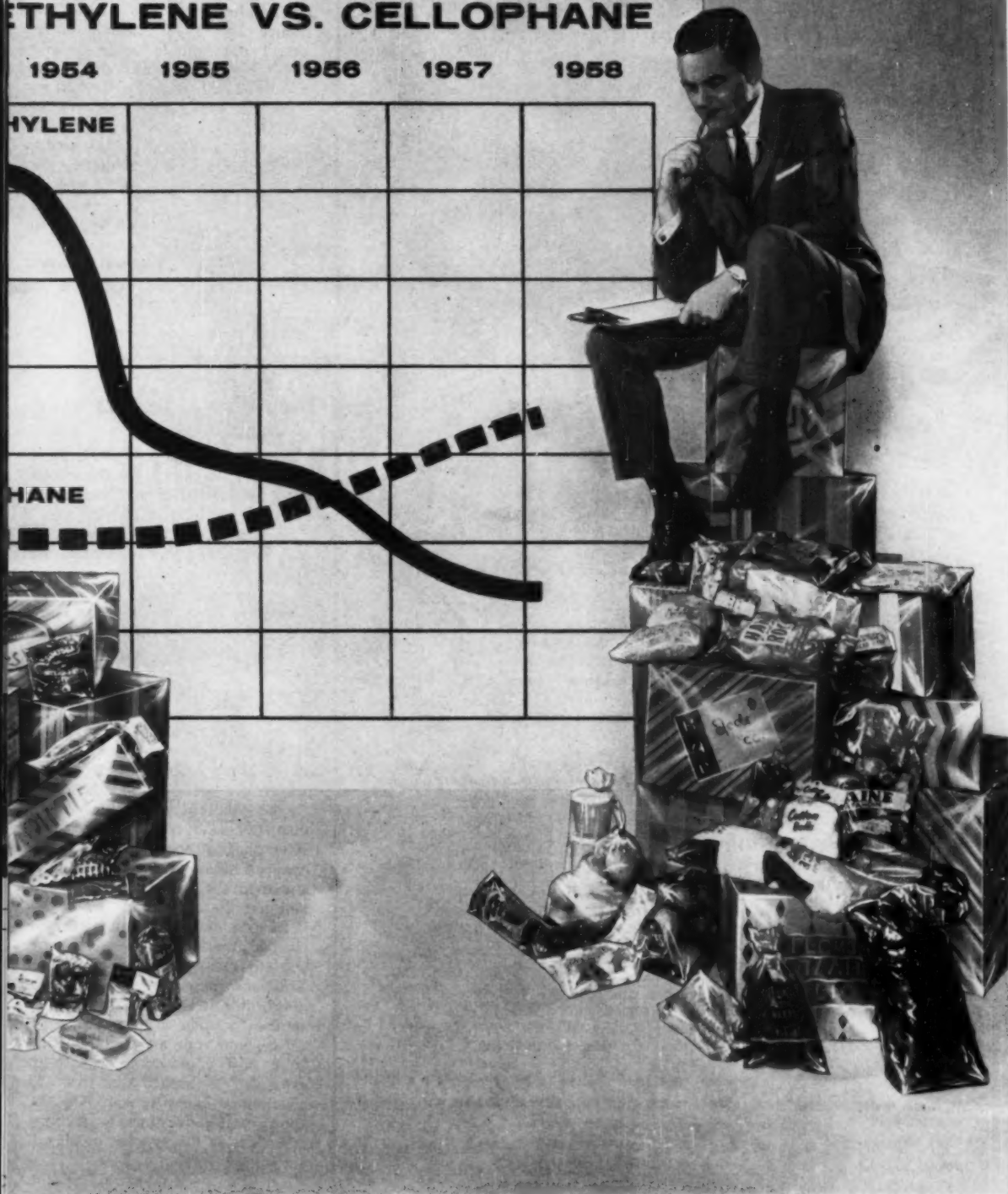


PICTURE: POLYETHYLENE VS. CELLOPHANE

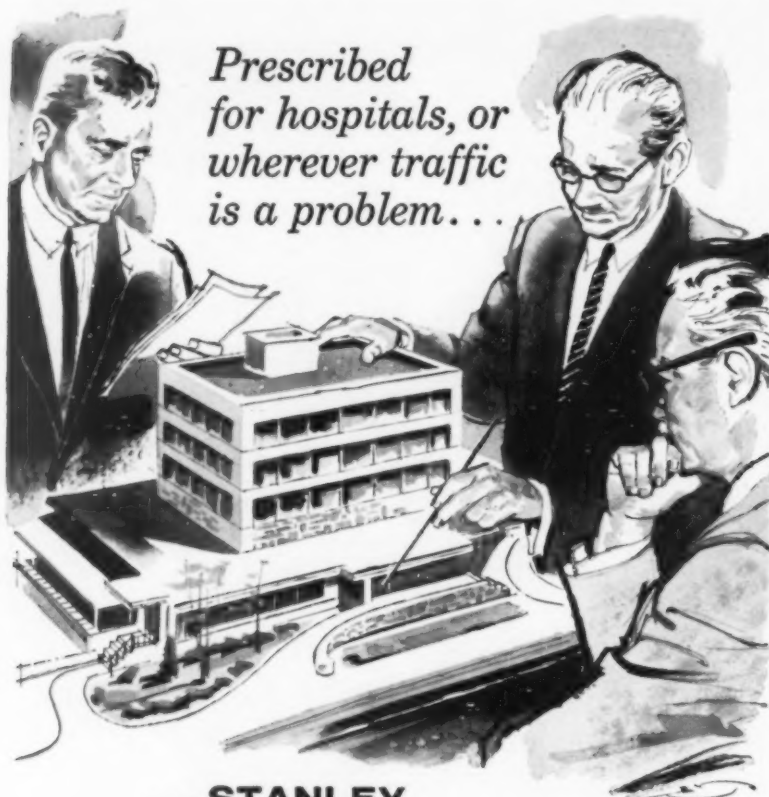
1954 1955 1956 1957 1958

POLYETHYLENE

CELLOPHANE



Economy of polyethylene film is demonstrated by amount of packaging a dollar's worth covers (right) compared to same amount spent for cellophane (left).



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though we have paid our 1957 taxes. Though Congress cannot make a retroactive change in taxes, it can approve a tax refund based on 1957 returns. The revenue service could calculate this when processing the April 15 returns and mail the checks without further ado.

The alternative plan, namely, to reduce the 1958 income taxes, would discriminate against those who suffer most under the recession: Those who have worked in 1957 and are unemployed in 1958 would obtain tax relief under the proposal made here, but not under any other proposal. Finally, the proposal solves the question of how to raise taxes again; it is clearly a one-time measure which applies to past tax rates only.

GEORGE KATONA

DIRECTOR ECONOMIC BEHAVIOR
PROGRAM
SURVEY RESEARCH CENTER
ANN ARBOR, MICH.

Impressive Results

Dear Sir:

Re: [BW—Mar.8'58,p99], there was a brief comment on the results of a survey of the effectiveness of employee reading racks.

In this survey, which our company originated and sponsored, we attempted not only to find out how many booklets were read and by whom, but also whether the reading of the booklets had changed the attitudes or thinking of employees. We asked, "Have any booklets ever given you a new idea or a different slant on things?" Eighty-three per cent asserted that they had. Then we asked, "If so, can you (1) describe briefly an example, and (2) What was the title?"

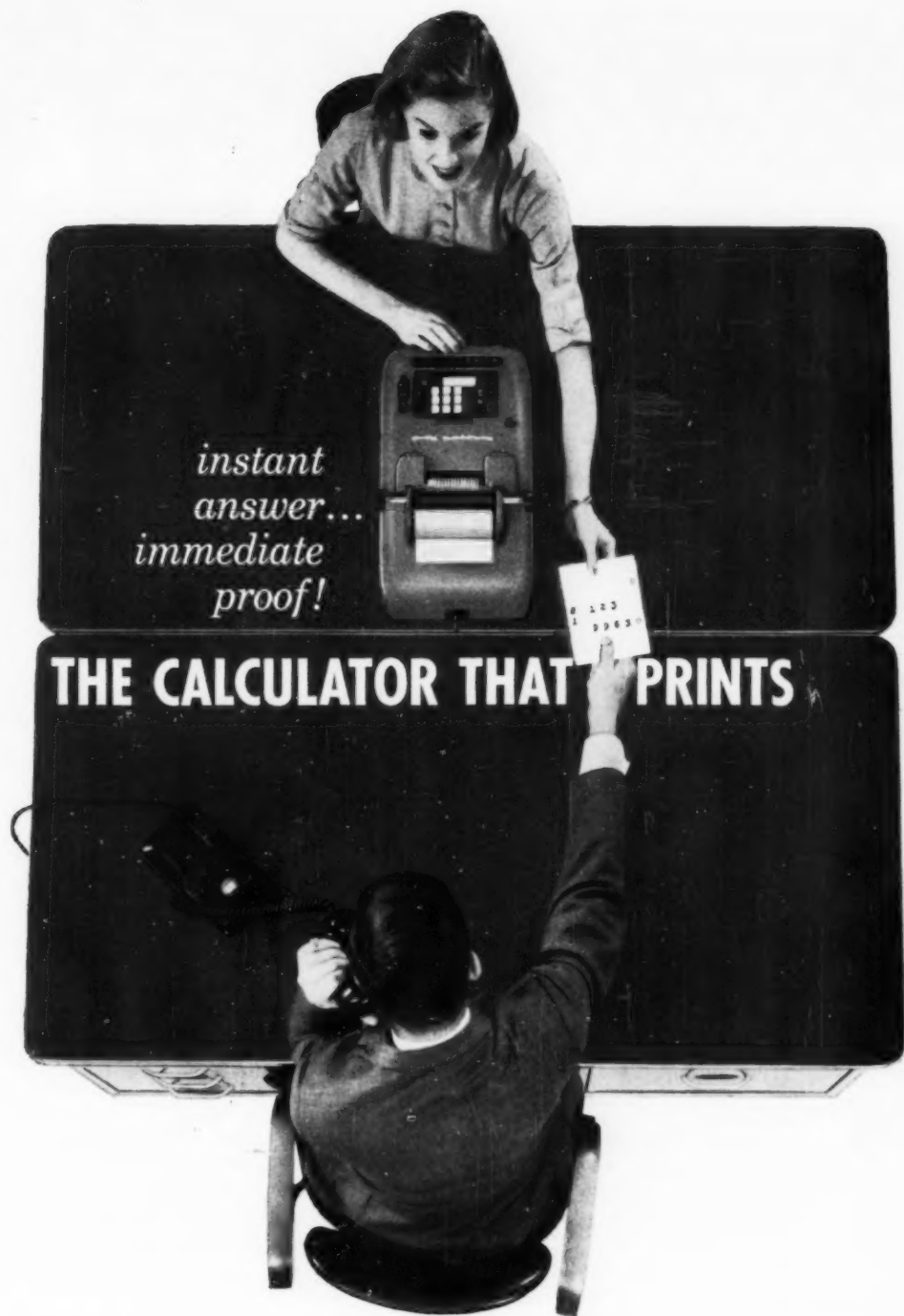
This would be similar to asking a BUSINESS WEEK reader to recall and state that a specific article had changed his mind about something, and then asking him to describe it and give the exact title.

In spite of the difficult nature of such a question, 15.9% . . . were able to recall a specific example. This, according to several research authorities, is an unusually high response to such a question. . . .

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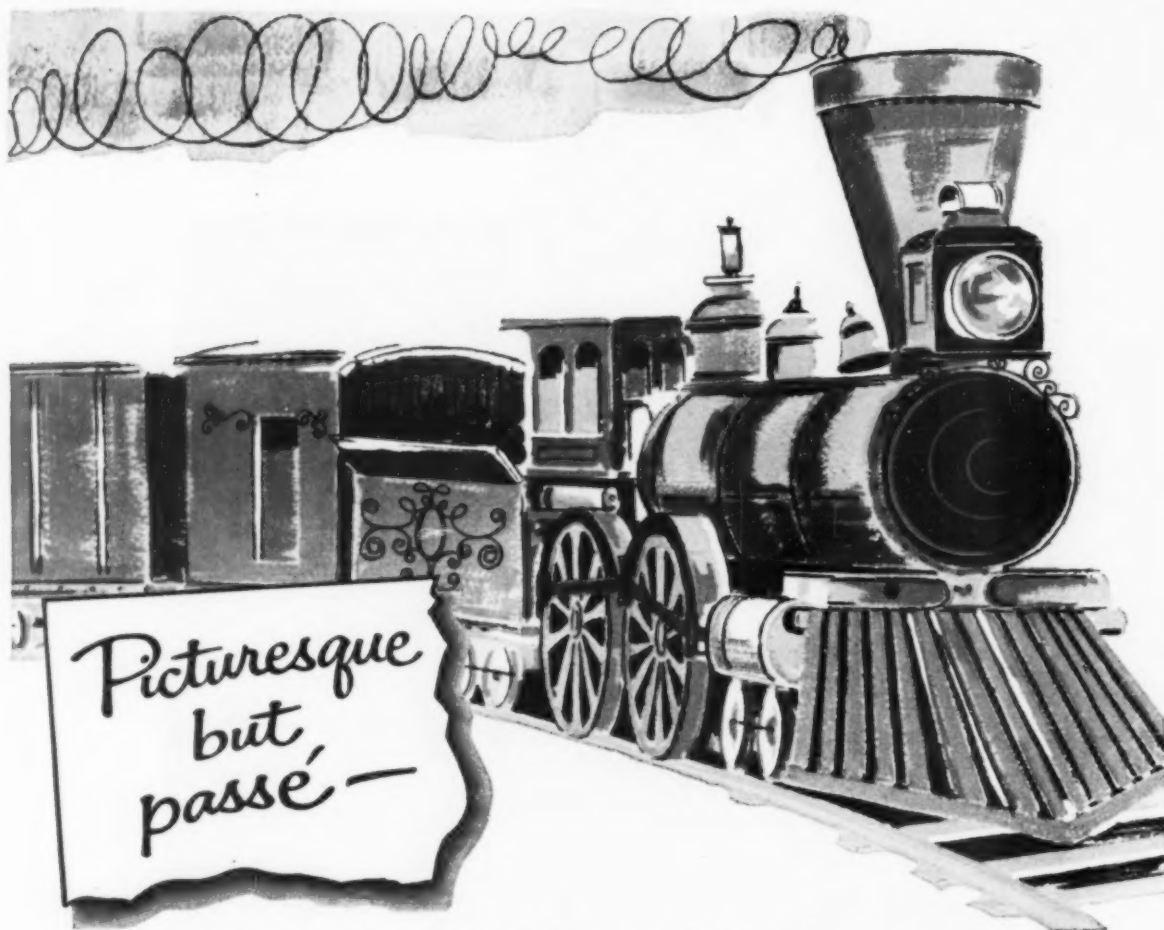
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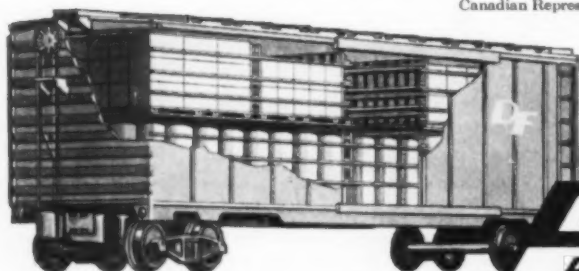
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Canadian Representatives, International Equipment Co., Montreal.

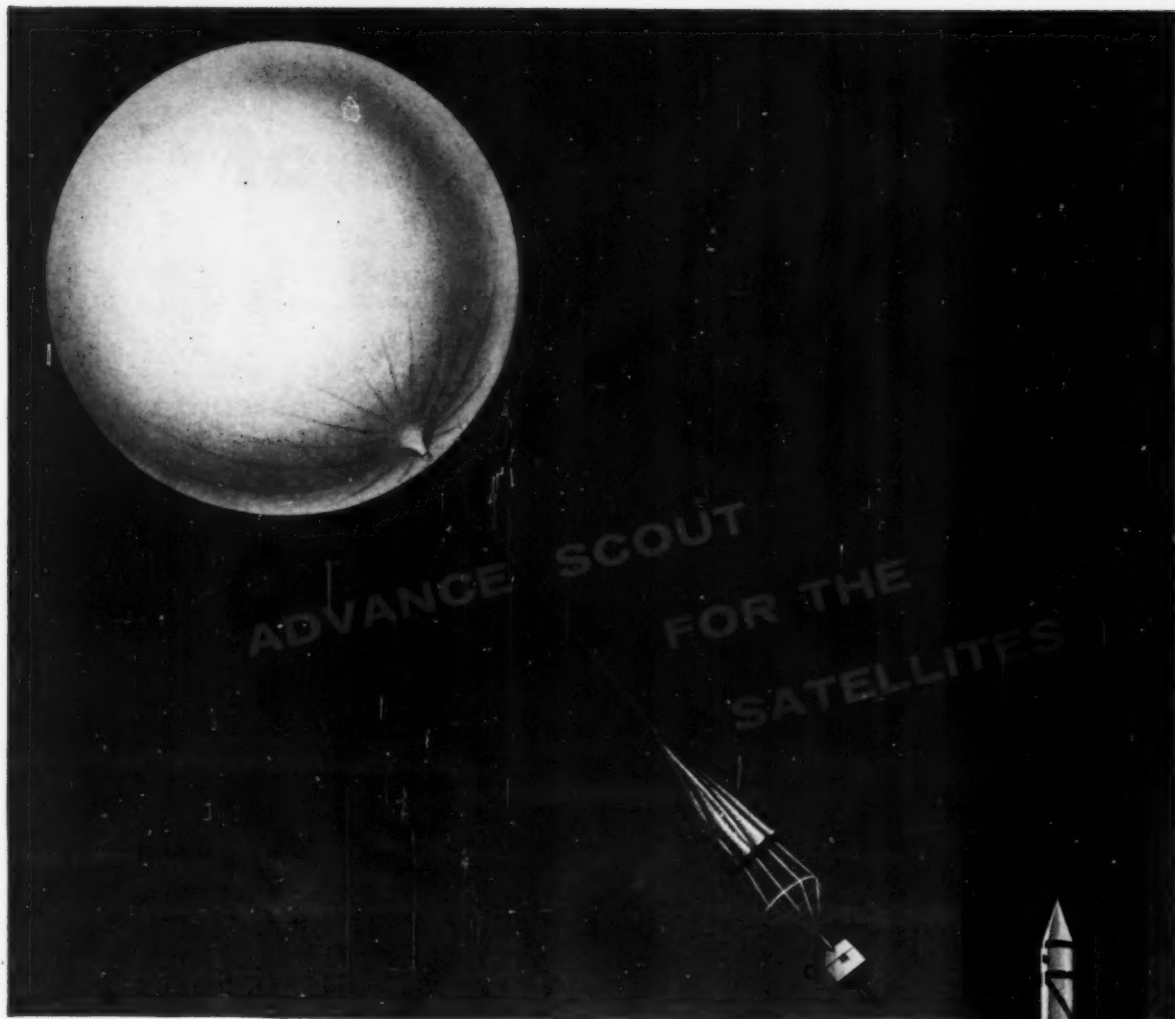


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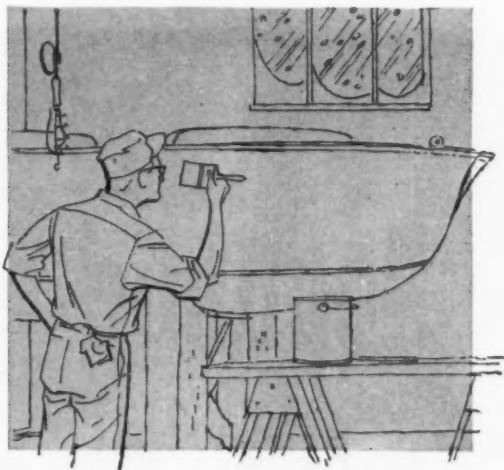
Bill Lewis, typical service engineer, proves how you can depend on Honeywell for fast, on-the-spot service even in emergencies.



3 It took Bill two hours to drive to the plant through the storm. He spotted the trouble immediately; a thermocouple and its protecting tube had burned out. It might have meant four to five thousand dollars' worth of damage.

Honeywell service begins when you first decide you need instruments, and continues long after they're installed. It includes:

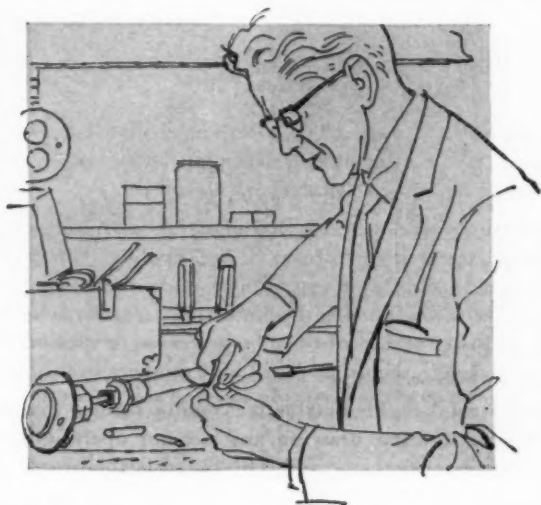
- Preliminary engineering, even before specifications are written.
- Application engineering for installation and startup.
- Service engineering help from your nearby Honeywell branch.
- Periodic service and swift help in emergencies.
- Training of your operators at the Honeywell Instrumentation Education Center.



1 Bill Lewis, service engineer at Honeywell's Fort Wayne branch, was in his garage, touching up the paint on his 13-foot outboard. The bowling match had been called off that night because of the snowstorm, and Bill was glad to be home.



2 At 9:30 a call came from the Crosby Laughlin Division of American Hoist and Derrick Company in Fort Wayne. A controller on a galvanizing kettle wasn't working and unless it was fixed fast, the pot would either freeze or burn out. Bill said he would be out right away.



4 Bill didn't have a thermocouple with him that would fit, so he improvised a temporary couple and protecting tube and got the system going. Early the next morning he called the Honeywell branch in Indianapolis and had the correct thermocouple and tube shipped quickly to the plant. Next day, he carefully checked out the entire installation.



5 Now, Crosby Laughlin Division is signed up with the Honeywell Periodic Service Plan, and its complete instrumentation is checked and serviced every month. Any spare parts needed are now available at Honeywell's Fort Wayne branch. Bill hasn't had to make another emergency call to the plant since.

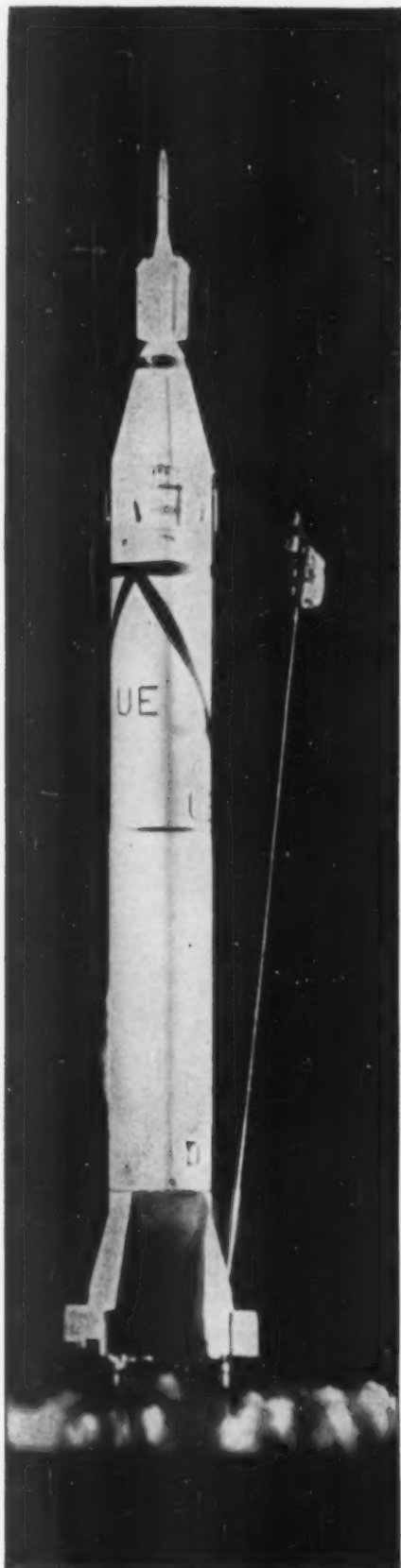
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Vital instruments in the nose section of the satellite are protected by a cone of stainless steel produced by Republic. This nose cone was fabricated from Type 430 by The Lodge and Shipley Company, Cincinnati, Ohio, using the Floturn Process. By flow-turning, the wall thickness of the cone can be increased in specific areas to comply with design requirements of high temperatures or stresses.

Stainless Steel is highly ductile. It is readily formed into desired shapes by cold-forming, drawing, and bending operations. It provides low thermal expansion and is highly resistant to atmospheric corrosion, erosion, and oxidation at high temperatures.

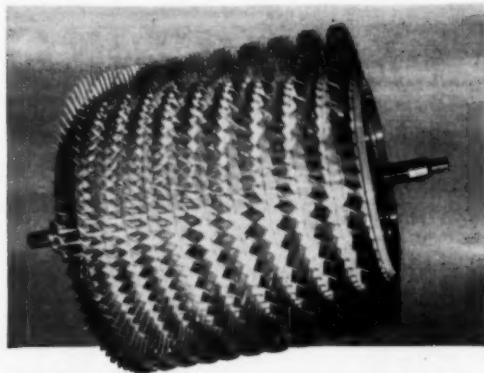
Republic is the world's largest producer of stainless, heat-resisting, and alloy steels. As rapid developments in the fields of supersonic aircraft and missiles increase demand for these high-strength, select formula steels, Republic is keeping pace through research and new production facilities.

Our metallurgists and engineers are always available, without obligation, to work with your personnel in using Republic Stainless Steels, Heat-Resisting Steels, Alloy Steels, and Titanium to best advantage. Check and mail the coupon if you would like a Republic specialist to call at your plant.

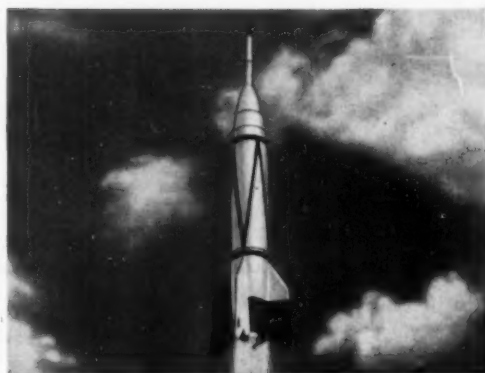
Official U.S. Army photograph shows launching of Jupiter-C Missile and "Explorer I" Satellite from Cape Canaveral, Florida, 10:48 PM, EST, January 31, 1958.



"Explorer I" is positioned on spin launcher. The satellite is spin-stabilized in much the same manner as a rifle bullet. Rotational spin of more than 700 RPM was started on the ground before the satellite was launched. In this Official U. S. Army photograph, the striped area at the top of the Explorer indicates the nose cone fabricated from Republic ENDURO Stainless Steel, Type 430.



REPUBLIC ALLOY STEEL provides high strength and dependable toughness in jet engine compressor rotor discs. In Pratt & Whitney's J-57 jet engine, Republic Hot Rolled Alloy Steel, AMS 6415 (AISI 4340), furnishes the highest strength values—plus an exceptionally high strength-to-weight ratio that permits the design of thinner, lighter sections to save weight and hold down size without sacrifice of strength or safety. The discs are machined from forgings by the Jet Division of Thompson Products, Inc. Forgings are supplied by Wyman-Gordon Company.



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Man Waiting



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for man and machine

In the past, production losses due to breakdown of dryer roll bearings were so small they could be made up.

Man Working



Output - 25 tons per hour
worth \$130 per ton

Today shut down of high-speed machines puts production behind by hundreds of tons per hour—quickly piles up losses.

Lubricating plan cuts downtime —can save \$10,000 in 3 hours

Not so long ago, machines shut down by bearing failure could make up production losses. Today volume output and integrated production mean that production losses are losses in profit. These are the reasons behind management's growing concern with lubrication methods in their plants.

Take this example from the paper industry: they used to figure \$500 for a bearing, \$500 for labor (idle time and repair crew) and expected to make up losses on the two or three hours downtime. Today, high speed machines produce twenty-five tons of paper per hour worth \$130 per ton. You can't ignore \$3,000 an hour in production

losses. In this case, the cost of the bearing replacement could run as high as \$10,000.

Lubrication problems differ with specific industries, but the basic principles are the same. Many companies are finding that the services of a plant lubrication engineer pay off. His services can extend part life, eliminate production losses, reduce rejects, simplify lubricant inventories and otherwise add to income. Some companies delegate lubrication responsibility to engineers or plant personnel who also perform other duties.

In both cases, Texaco's organization of Lubrication Engineers is function-

ing in all 48 States, as consultants in outlining a practical approach to these problems. A more detailed discussion is available in an enlightening booklet: "Management Practices That Control Costs Via Organized Lubrication." Write The Texas Company, 135 E. 42nd St., New York 17, N. Y., Dept. B11.



LUBRICATION IS A MAJOR FACTOR IN COST CONTROL
(PARTS, INVENTORY, PRODUCTION, DOWNTIME, MAINTENANCE)

BUSINESS OUTLOOK

BUSINESS WEEK

APR. 26, 1958



Businessmen can now find tangible reasons for hoping that things won't get much worse between now and mid-year.

This week's reduction in the prime rates charged by commercial banks (page 29) signaled cheaper borrowing.

And heavy equipment makers—including the machine tool industry—reported a pick-up in orders since February.

Announcements last week by the nation's top economic officials were designed to give confidence a lift.

Chmn. William McC. Martin, Jr., of the Federal Reserve laid down a monetary policy of "active ease" to help cure the slump.

And Treasury Secy. Robert B. Anderson predicted that spending this fiscal year will be over \$73-billion—with a deficit of \$3-billion.

This means that cheap money and budget deficits—the standard post-war recession remedies—are now official.

These aren't the vigorous anti-recession measures—such as tax cuts—that many influential groups advocate. But they still have some punch.

Here's an optimistic assessment of these measures:

- **Federal outlays will have to jump** by \$10-billion at annual rates if Secy. Anderson's forecast is fulfilled. About \$20-billion must be spent in the April-June period to reach the \$73-billion-plus figure he cited. That's an annual rate of \$80-billion.

- **Inventory paring can't go on at the excessively high rate** of \$7-billion maintained in the first quarter. Cheaper bank money will help by reducing the cost of holding stocks. And a slow-down in the liquidating rate means business buying must be stepped up.

- **The money supply** (seasonally adjusted)—which had been declining since last July—began increasing in February. This money will show up as more ready cash held by business firms and consumers.

All this could help stem the tide. But it doesn't mean the recession will end soon. Even the more sanguine economists don't look for a real upturn until fall. For one thing, many of them doubt that government spending can step up as fast as Anderson expects.

—•—

Machine tool orders registered another rise in March. Last month's bookings of \$29-million were the largest since last August.

Any improvement, of course, brightens the outlook for the tool industry.

But new orders are still a long way from matching shipments. Order backlogs declined another \$15½-million as more than \$45-million of tools were shipped during the month.

—•—

One of the unhappiest aspects of the recession has been the mounting cost of living.

March's index of 123.3 means that living costs have climbed by 3.7% in the last year. Food alone cost 6.7% more than a year ago.

But most other goods and services also cost more. Costs of housing,

BUSINESS OUTLOOK (Continued)

BUSINESS WEEK
APR. 26, 1958

transportation, medical care, reading and recreation, and other living expenses are still rising.

Lower food prices, however, are around the corner.

Prices soared last winter owing to a 10% drop in the slaughter of meat animals while cold and rain cut fruit and vegetable crops in Florida, Texas, and California—the chief growing areas of winter produce.

But beef-eaters will find lower prices soon as more cattle come to market from the feedlots. Last Monday's cattle receipts at Chicago were the biggest in three months.

Pork prices, on the other hand, won't drop much until fall when the hog slaughter will be bigger.

The spring vegetable crop—though smaller than normal—will still be large enough to bring prices down from present levels.

—•—

This week's steel rate is scheduled at less than 47% of capacity. And though some steelmen report better orders for May, they're cautious.

Four more blast furnaces were shut down earlier this month in the Pittsburgh area. That leaves only 25 of the 47 furnaces still operating—a tip-off that no upturn in the melting rate is expected soon.

And scrap prices in this steel center reflect the same dim view of near-term activity.

The No. 1 heavy melting grade tumbled \$3 to \$32 a ton. That's the lowest price since 1954.

—•—

Spring came a little late this year for the Northwest's lumbermen.

Lingering cold hurt lumber sales, and the usual March mark-up in prices didn't come off.

But April brought better construction weather in the U. S. and brought the spring thaw in British Columbia (which closes roads and so blocks shipments to the U. S.), so lumbermen are now raising their prices.

Last week's \$2 jump in a key grade of fir two-by-fours was the second in as many weeks. At \$59 a thousand board feet, this price is still a good deal below last spring's \$66.

Industrial buyers have the advantage now with demand weak in most markets. Though mostly undercover, plenty of bargains can be found.

But some price-cutting actions make news:

- Texas Instruments cut prices for commercial transistors 5% to 25%.
- Small twist drill prices were pared by 5% to 20% on large orders.
- Cloth buyers managed to bid down cotton gray goods by ¼¢ to 17¢ a yard for the key 80 squares.

—•—

Further cutbacks in non-ferrous metal output were announced this week.

International Nickel will cut nickel production another 10%.

Kennecott Copper is reducing copper output by another 3,350 tons a month.

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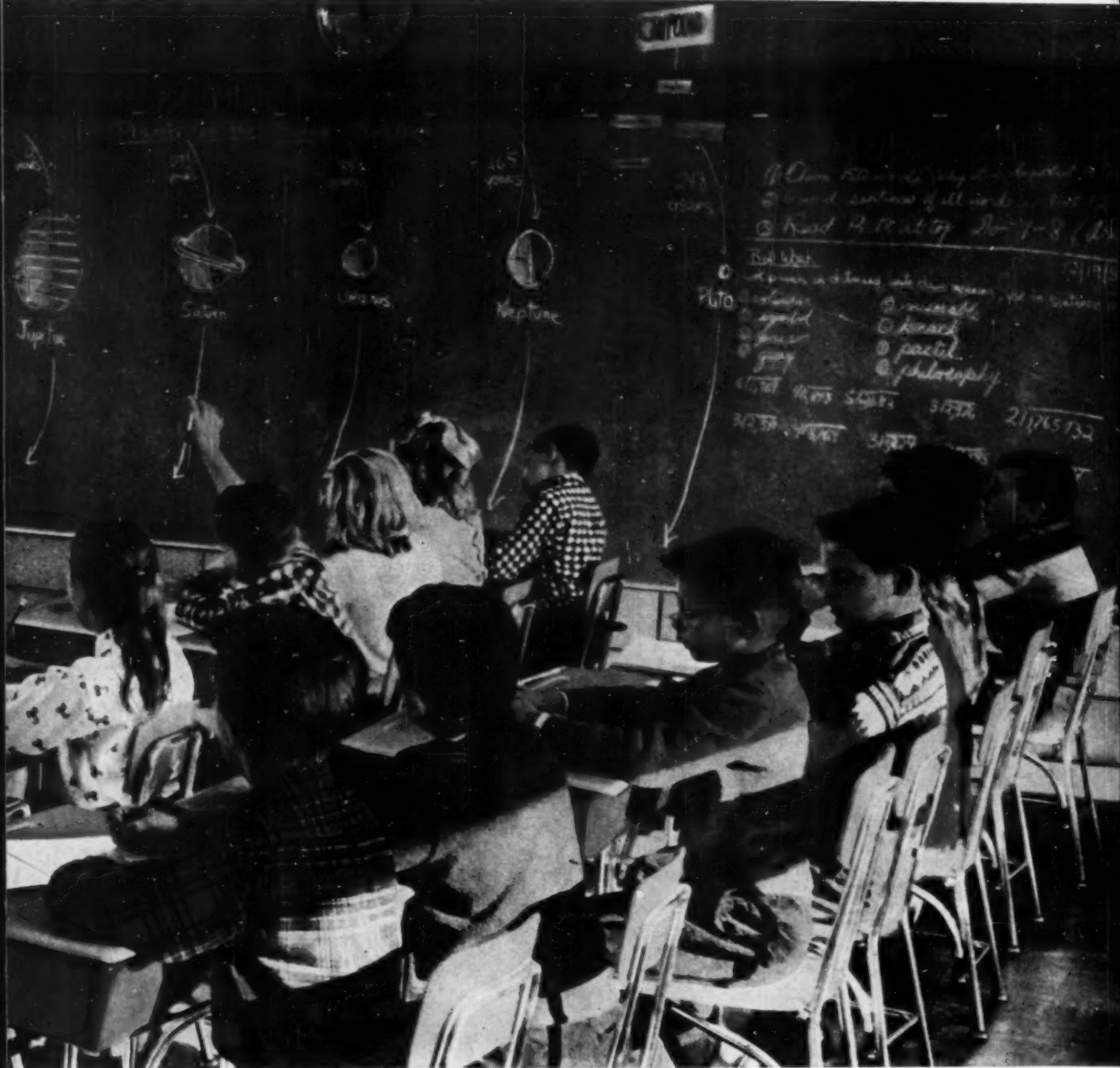
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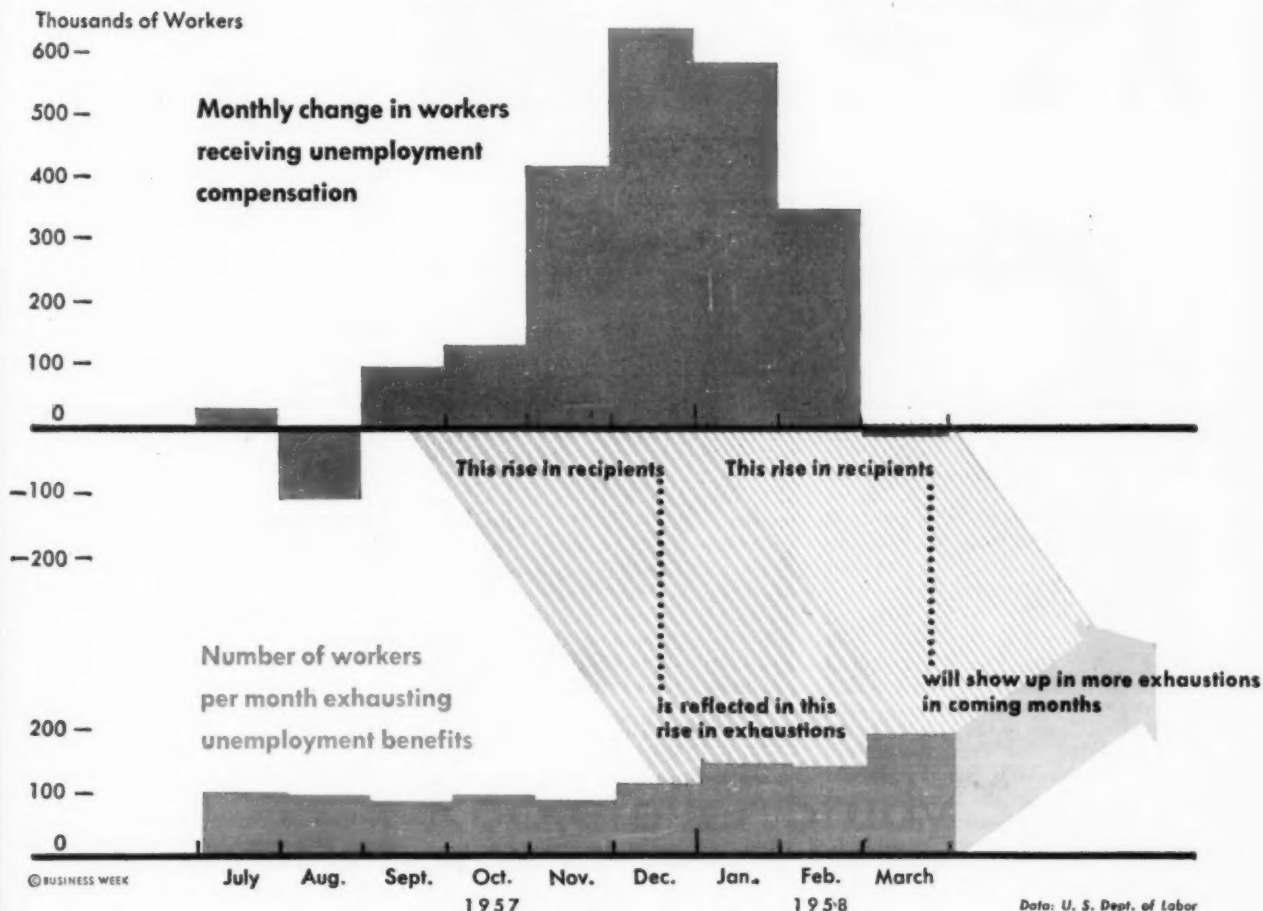
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ALL-STEEL EQUIPMENT INC. AURORA, ILLINOIS

A Growing Problem: Used-up Unemployment Benefits



The Issue Now: Federal Help

Last week, more than 75,000 jobless workers across the country glumly picked up their last unemployment checks at state offices. The maximum benefits they were entitled to had been exhausted in prolonged idleness. They and more than a half-million others whose benefits have already run out (chart) face a rough scramble for subsistence income. Some may have to go

to public or private agencies for aid.

The one bright glow on their horizon was the prospect of Congressional action to put into effect a federal unemployment relief program—either a new and more free-handed Democratic version or the one favored by the Administration.

• **The System**—The unemployment compensation system has been under

fire for some time as antiquated; major changes are sought by labor and are widely urged by some public officials.

As it stands, the program is operated jointly by the states and the federal government. The states set the rules covering eligibility, the size and duration of payments, and employers to pay the costs. The federal government sets certain standards for the state programs,

pays administrative costs, and serves as a trustee for state reserve funds.

- **Mills Bill**—This week, the Democrats' Mills Bill—named for Rep. Wilbur D. Mills (D-Ark.), chairman of the House Ways & Means Committee—shoved the Administration program aside, at least temporarily, in the House. Given bipartisan clearance, despite the White House opposition, it proposes:

- To extend unemployment benefits ranging up to \$45 a week for 16 weeks to the 14-million jobless workers who have exhausted state benefits since last June 30, and to a steadily rising number who are now running out of UC credits, month by month.

- To make the same benefits available for 16 weeks to those who have never collected state benefits because they were not covered by unemployment compensation laws, but who would otherwise meet minimum state standards. The number who would benefit is estimated at 1.5-million of the 2.1-million jobless who are excluded from state coverage. The other 600,000 would be barred for technical reasons.

Costs under the Mills Bill (estimated to run as high as \$1.5-billion) would be paid by federal grants to the states. Payments would begin 15 days after the bill becomes law, and the program would run through June, 1959.

- **GOP Opposition**—The Mills Bill differs substantially from the Administration proposals, which would provide a 50% extension in the duration of benefits allowed under state laws and would not extend the payments to those who are excluded from present coverage. Moreover, the Administration would, in theory, only advance money to the states—to be repaid as loans or offset later by a higher federal tax on payrolls.

Because of these differences, considered major ones in the White House, it is predicted that Pres. Eisenhower would veto the Mills Bill if it should reach him in its present form.

Key Republican leaders are urging the Administration to act, possibly to advance a more liberalized UC plan. But, at midweek, the White House still favored holding back to get a clearer picture of which way the economy might be going.

- **Soaring Number**—One thing is certain: All across the country, workers are using up their unemployment benefits at a rate that is soaring.

BUSINESS WEEK reporters surveyed conditions in the worst-hit 24 states this week. Although some commented on "a new note of optimism" here and there, all found UC exhaustions running 50% or more higher than in the early months of 1957, and continuing to go up sharply, week by week.

In many states, even cautious officials indicated that the problem will become

acute in May or June—when the heavy impact of industrial layoffs in late 1957 and early 1958 will be reflected in UC "run-outs" in the majority of states.

Where they were available, estimates of second-quarter exhaustions ran as much as 50% to 100% higher than in the first three months of 1958.

Michigan, for example, was one of the earliest affected by the economic downturn and has been one of the hardest hit. Its law provides for a minimum of 10 and a maximum of 26 weeks of benefits. In 1957's last three months, 18,850 jobless workers—for the most part young, single persons—exhausted UC benefits. In the first quarter of this year, the number rose sharply, to 36,663.

By now, benefit exhaustions are running at about 1,000 every working day, and those affected are family men. A spokesman for the Michigan Employment Security Commission says that, in Detroit particularly, "unemployment hardships haven't really started yet."

- **Widening Effect**—Connecticut reported 5,665 "run-outs" in the last quarter of 1957 and 10,391 in the first three months of this year. State officials estimated that 18,000 would exhaust their UC credits in the second quarter, but a special session of the legislature acted last week to prevent that happening. It passed an emergency measure that allows unemployed workers who exhaust UC benefits for the current 1957-58 period to claim 50% of any unexhausted benefits for the year ended July 1, 1957.

The Connecticut measure expires when and if the federal government provides equivalent additional unemployment aid, or no later than July 4, 1959. About 48,000 workers are expected to benefit if the law runs its full course.

New York's Div. of Unemployment reported 20,828 exhausted UC benefits in the last quarter of 1957 and 28,324 in the first three months of this year. The weekly "run-out" rate is now 3,300 (last year at the same time it was under 1,500), and exhaustions in the second quarter are expected to reach 45,000.

In all of New England, exhaustions totaled 27,718 in the final months of 1957 and jumped to 42,158 this January, February, and March. This month, UC offices report continued increases in the number of exhaustions.

Otherwise, around the country, the situation has varied, with Tennessee reporting only a slight jump in exhaustions; Alabama, that terminations will be up again for this month but should "begin to taper off in May"; and Texas, that "run-outs" rose sharply in the first quarter but are expected to level off about 50% above normal.

- **National Picture**—Nationally, accord-

ing to statistics in Washington, 287,000 jobless workers exhausted UC credits in the states in the last three months of 1957, 482,000 in the first quarter of 1958—compared with 314,000 terminations in the same months of 1957.

Between July 1 of last year and the first of this month, 1,041,552 workers ran out of UC benefits.

- **What Next?**—What's happening to those who exhaust UC credits? Would a federal unemployment relief program help them?

In Utah, "a surprising number of workers are able to find work as soon as their compensation runs out"—they quickly become less selective when the assurance of weekly jobless pay is gone, a state official commented.

Job seekers, particularly those off UC rolls, are downgrading themselves. According to a union official in Des Moines: "They're getting jobs of sorts. Maybe they are taking substandard jobs, but it keeps them going."

In Detroit, "undesirable" jobs are just as hard to come by now as the good ones." There are two corners in Greater Detroit—one for white men, one for Negroes—where men "shape up" daily for any job at any pay offered by passersby.

- **Security Sought**—Several reporters mentioned long lines of applicants for civil service jobs. One said 600 have filed for policeman jobs. In Los Angeles County, an announcement of hospital attendant openings jammed civil service offices; 120 applications were accepted while 700 persons were turned away. Before last January, there were never enough applicants to fill existing vacancies.

- **Employers Choosy**—While jobseekers have downgraded themselves, prospective employers have upgraded their requirements. A Los Angeles company that once had trouble filling clerks' jobs with women now hires only men—and has not run into any difficulty finding them. A Philadelphia employer says he is "able to get better-qualified people for the low-pay jobs now."

- **No Bread Lines**—In every city checked, welfare and relief rolls are up but bread lines—the symbol of the Great Depression—aren't to be found. Surplus foods are being distributed—but, several reporters said, demand for them hasn't materialized.

Unemployment compensation "run-outs" aren't blamed for the relief load increases in most places. In Portland, Ore., only 100 of 2,500 general assistance cases came from UC exhaustion rolls. The reason given there apparently is true elsewhere. "Not too many are showing up, because they have savings or because another member in the family is holding down a job," a Portland county welfare official said.

Here's how the Rockefeller Report analyzes the economy, what it recommends:

The immediate problem:

RECOVERY

1. A big tax cut across the board for individuals and business.
2. Faster depreciation rates on those capital improvements that are started during the next 12 months.
3. Acceleration of public works already underway and a start on new ones that can be launched in 3 months, completed in another 12 to 18 months.
4. Further easing of money and credit.
5. Emergency federal aid to supplement state jobless pay.

The long-term problem:

GROWTH

1. A 5%-a-year goal for growth of GNP—instead of the 4% achieved in the last decade.
2. Elimination of economic rigidities—by gradual tariff reductions, strong antitrust policies, curtailment of labor featherbedding.
3. Tax reform (after a thorough study by a special commission) to achieve lower rates for individuals and corporations, more equitable treatment.
4. Increasing public works expenditures to a rate at least 50% higher in 1967 than in 1957.
5. Monetary and fiscal policies that promote growth.
6. Aid to small business to decrease the merger rate.
7. Concentrated attention to agriculture, transportation, and urban redevelopment.



THOMAS McCABE, former chairman of Federal Reserve, headed economic subpanel.



NELSON ROCKEFELLER headed the main panel of businessmen and economists.



ARTHUR BURNS, former chairman of Economic Advisers, was on working panel.



CHARLES PERCY, on over-all panel, helped spark AMA Economic Mobilization.

Rockefeller Study Spurs Call for Recovery Action

This week brought signs of growing impatience among top businessmen who want anti-recession action. Notable among these signs: the economic report of the Rockefeller Brothers Fund study group (table, left).

A loose-knit lineup of forces seems to be developing outside Washington to buck the Administration's official resistance to major government moves—particularly a tax cut—to cure the business slump.

There is no organized or concerted anti-Administration drive. Among those who see a need for a stronger anti-

recession policy, there is probably as much disagreement as agreement on the timing of action, on the amount that is necessary, on the details of what should be done. Yet this part of the business community is linked by one belief: It isn't inflation that should be worrying the country right now but the danger of continued recession.

• **More Than Coincidence**—Thus, corporate executives and influential economists are putting themselves and their organizations on record in favor of a variety of anti-recession plans.

Some would be content with more

consumer pep talks. A Boston ad agency executive calls for relaxation of what he terms "management's suicidal non-expenditures policy." Then there are the programs carefully worked out, such as that of the Rockefeller group, for long-range as well as short-range needs of the country. Within this range of thought, however, there are enough interrelationships to show that what's going on is more than simple coincidence.

Even the American Management Assn.'s call for a special Economic Mobilization Conference in New York on May 19-20 appears to have been influenced by the new sense of urgency among those who were earlier unimpressed by the recession. Pres. Eisenhower, Vice-Pres. Nixon, and Commerce Secy. Weeks will be at the conference, along with more than 1,000 of the nation's top businessmen.

- **Startled by Baruch**—The timing of the more explicit demands for action among businessmen can be traced partly to the Senate testimony of Bernard Baruch. Baruch's plan for standing pat on taxes or even raising them and for cutting government spending—and its favorable reception in Administration circles—apparently startled some of the less conservative business leaders into seeing a need to counter such ideas.

I. Rockefeller Report

Carrying perhaps the greatest weight among the more specific calls for anti-recession action is the Panel IV report—The Challenge to America: Its Economic and Social Aspects—of the Rockefeller Brothers Fund Special Studies Series, released this week.

The story of how this report—particularly the part dealing with the recession—came to be written is a good example of the difficulty of mustering business opinion for any given course of action. The report is signed by the over-all panel of 30 businessmen, economists, and educators, but a note states: "Not every member endorses every detail, but we have approved its substance, and we strongly urge implementation of its recommendations."

- **Other Ties**—Even so, some of those responsible for the report are linked with other groups that are seeking at least a wider recognition of the seriousness of the recession. And these ties help to give a degree of unity to the calls for action.

For example, the Rockefeller economic panel included J. Cameron Thomson, chairman of Northwest Bancorporation, Minneapolis, and Frazar B. Wilde, president of Connecticut General Life Insurance Co. Both were also on the Committee for Economic Development when it issued its earlier,

if less urgent, call for strong anti-recession measures.

CED urged a tax-cutting program similar to that in the Rockefeller report, and almost identical plans for increased spending on public works.

Charles H. Percy, president of Bell & Howell Co., is another signer of the Rockefeller report. He is also a member of the President's Business Advisory Council and active in AMA, an enthusiastic backer of its Economic Mobilization conference.

- **How the Group Worked**—The broad study was organized in June, 1956, with Nelson A. Rockefeller as over-all chairman. Its aim was "to assess the major problems and opportunities" that are likely to face the U.S. in the next decade.

Work began with an over-all panel of prominent citizens, heavily weighted on the business side; the writing of background papers by about 100 specialists; and the selection of subpanels to submit findings to the main group as preparation for final publication. The first Rockefeller study—International Security: The Military Aspect (BW—Jan. 11 '58, p. 26)—is credited with strongly influencing the Pentagon reorganization plan the President submitted to Congress.

The economic subpanel was headed by Thomas B. McCabe, president of Scott Paper Co. and former chairman of the Federal Reserve Board, and included such men as Dr. Arthur F. Burns, ex-chairman of the President's Council of Economic Advisers.

II. Long-Range View

At the start, hardly anyone was worrying about the first tentative signs of a business letdown, and the subpanel's assignment was to lay out long-range plans for a growing economy. Consequently, the bulk of the Rockefeller study is devoted to the next decade and to the policies that need to be followed.

The report urges policies that will accelerate the growth rate to an average of about 5% a year in gross national product.

Rockefeller's group sees no clash between the two goals of sound economic growth and full employment. "Each of these goals," says the report, "is a means to the other. . . . Growth is necessary for the maintenance of full employment. And protracted failure to maintain full employment would, in turn, undermine the incentives to invest that are essential to growth."

- **How to Do It**—The report bases its estimate of the need for a 5% annual rise in GNP on its projections to 1967, including a prediction of \$203-billion in spending by federal, state, and local governments (1957 outlays for educa-

tion alone are expected to double to \$30-billion). This allows for 1967 spending of \$70-billion on national security, \$45-billion on welfare, and \$27-billion on public works.

For resisting long-term threats of recession or of inflation, the report calls for flexible policies that can quickly move either way.

III. Short-Range View

When this broad-gauged economic forecast was being written, its authors obviously assumed that a drastic change in the country's growth rate of the last 10 years was unlikely. As the report neared final approval and publication, it became clear to some influential members of the group that the recession, if allowed to proceed at its current pace, would wreck the long-term calculations.

There were some hurried consultations, not only to speed up publication but also to preface the report with a call for immediate action to pull the economy out of its decline. This phase of the work was spurred by the difficulty some businessmen and economists found in trying to impress the Administration with the risk it was running in delaying anti-recession steps.

"We ran into a strange paralysis of thought and action," says one panel member.

The non-appearance of predicted upturns finally gave the upper hand to the businessmen who thought prompt action was necessary, and the study was completed under forced draft. No agreement could be reached on how big a tax cut should be urged, but Nelson Rockefeller has publicly recommended a cut of \$5-billion to \$7-billion.

- **Whose Responsibility?**—Though the report strongly recommends government action, it assigns responsibility also to private enterprise. "Businessmen," it says, "should not wait passively for government action."

This is also the thought behind the AMA's decision to stage a big conference. AMA Pres. Lawrence Appleby says it was inspired by Eisenhower's comment that "the real mainspring of our kind of economy is not government but the built-in thrust and vigor of private enterprise."

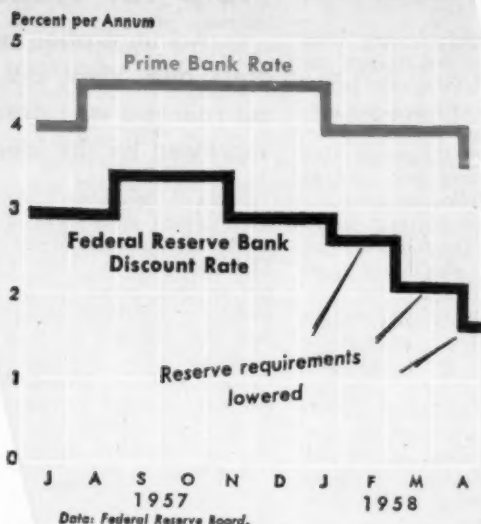
AMA's high command was undoubtedly influenced, too, by the enthusiasm that Percy—a director through 1957 and now on the planning council of the general management committee—brought from his work with the Rockefeller group. And men who may not have been convinced of the need for immediate government action agreed on the value of bringing businessmen together to remind themselves that the long-term outlook for the economy is still rosy—if the recession doesn't set it back too far.

Stepping

Down



from
tight
money



Banks Follow the Fed's Lead

After repeated loosening of the money supply, the nation's commercial banks have lowered the prime rate to 3 1/2 % but they don't look for any surge of borrowing to result.

The cost of bank borrowing dropped sharply this week. Led by New York's Guaranty Trust, the nation's commercial banks cut the prime rate they charge their biggest and best customers for loans from 4% to 3 1/2%. Since all other rates are scaled upward from the prime rate, all borrowers were thus served notice that credit would be cheaper for them, too.

This was the second time this year that the banks have cut the prime rate (chart above). The first cut did not come until two months after the Federal Reserve had officially signaled a reversal of its tight money policy by cutting its discount rate from 3 1/2% to 3%. Since then, the nation's money managers have pursued an aggressive policy of "active ease," with three further cuts in the discount rate they charge the banks and three successive reductions in reserve requirements.

• Slow to Follow—But until this week, the banks had failed to make a second reduction in what they charge their customers. They maintained the prime rate at 4% despite the fact that it was clearly out of line with the discount rate and all other short-term rates. Borrowers who could qualify for the prime rate, for instance, could get needed funds in the commercial paper market at less than half what the banks charged.

The fact is that the Fed, annoyed at

the stubbornness of the banks, decided to force the issue. Last week, in an unprecedented double-barreled move, it reduced both (1) the discount rate at which member commercial banks can borrow from the Fed and (2) reserve requirements—the percentage of reserves banks must hold against deposits. These two moves promptly made credit cheaper and more readily available to the banks—and thus to all borrowers. As one banker put it this week: "They were the cannons that broke our back."

• Evidence of Ease—The Fed's move was not only directed at lowering bank lending rates. It was also an indication that the monetary managers are determined that credit policy will not stand in the way of recovery. They are mindful that monetary policy is being blamed in political and business circles for helping to bring on the decline. While they deny this charge, they are plainly anxious to provide ample credit now.

It is significant that the move was made just before Fed Chmn. William McC. Martin was due to testify before Congress. Fed officials apparently hoped the action demonstrated they were pursuing a flexible policy that now is aimed at encouraging borrowers.

When Martin did appear, he testified that the current decline is "a reaction to both the investment boom and the

inflation which accompanied it." As such, he felt that it was unavoidable, but he claimed that the Fed "is approaching the problem of combating recession with just as much vigor as it exhibited in battling inflation."

• More to Come—In fact, one official hinted this week that further ease may be in the offing. In his view, the decline to date has been deeper than anticipated, and the money managers will do their part to keep it from continuing. "What we can do is limited at this stage," he said, "but we will do all we can."

It is an open secret that the Administration was pressuring the Fed for further action. And the Fed's decision to make two moves at once may be an indication that easy money is being relied on as the main means of bringing about a recovery. The Fed itself has doubts that easy credit alone can create an upturn, but it is no longer cautious. It is firmly intent on lowering interest costs.

• Bank Reactions—There is no question that the response of the banks was gratifying. But some officials were bitter about the delay. "There was no justification for holding up a reduction as long as they did," said one Fed banker. "They showed no reluctance in going up when money was tight, but they aren't encouraging fresh borrowing by standing still after we made money easy."

Some banks were reluctant to go down even after the Fed's latest moves. A good many bankers report that while demand for credit is definitely slackening, they already have swollen loan portfolios, and are in no hurry to invite any new borrowing. Instead, they have used the fresh funds available to increase their liquidity, which was badly impaired during the tight money period. In the past two months, they have been buying government bonds and other securities rather than making new loans.

• Slipping Demand—Few bankers think the reduction in interest rates will spur borrowing. An upturn in demand for credit, they say, must await an upturn in business. And at the present time, bankers are expecting further declines in loan demand even though credit is cheaper.

This forecast of lower demand for bank credit is probably accurate. Business is still liquidating inventory, which means an increase in cash balances. And a number of companies are borrowing funds in the long-term capital market, partly in order to pay off bank debt. This trend should continue in the months ahead, especially because there is a good prospect of borrowing long-term funds at low interest rates.

Most bankers say they are not worried by losing borrowers to the capital

market. But it is doubtful that bankers would maintain an uncompetitive rate structure when demand starts asserting itself again.

• **Paving Interest**—The fact is that despite their unwillingness to cut the prime rate, many banks, particularly the big institutions, have been "shaving" interest costs to customers (BW—Apr. 12'58, p142). They have not insisted that borrowers keep large compensatory deposits, which had the effect of increasing the cost of loans. And they have been arranging short-term loans for preferred customers through the bankers' acceptance route, which costs less than 2%.

But the Fed was not satisfied with this kind of interest price cutting. They regarded it with the same distaste they feel for administered industrial prices. The Fed wants price adjustments all along the line. And it considers the prime rate has not truly reflected the amount of ease that monetary policy has provided. Even this week's reduc-

tion is regarded as "the least they could make without being accused of profiteering."

• **Follow the Leader**—In forcing down the banks, the Fed is making new use of its weapons. All during the period of restraint, the discount rate was generally a follower rather than a leader—it was raised to confirm the rise in other rates. The last discount rate hike, in August, was such a following move.

But the November discount reduction led the market. The following two cuts were made only after other short-term rates moved down. But the newest reduction, coming in combination with the cut in reserves, was clearly a signal of an active, even aggressive policy of ease.

In any case, the Fed is now admitting that inflation is no longer the danger. In fact, it is willing to risk the threat of future inflation by making credit cheaper and more readily available than it has been since the easy money days of 1954.

Crash Steps Up Pressure for Safety

This week's two-plane collision points up need for better controls before the big jet airliners go into service.

Once again, tragedy in the air has jolted Congress into the realization that more must be done—faster—to make the crowded skies safer for the big jet airliners that will begin carrying passengers late this year.

History repeated itself when a United Air Lines' DC-7 and an Air Force F-100F jet fighter smashed together this week near Las Vegas, Nev. This made four midair collisions in the West and Southwest in two years, and it ran the death toll from such accidents in the same period to 260. The latest accident involved one plane flying under air traffic control and another flying under "see and be seen" rules.

• **Pressure**—Investigations are being talked up by almost every Congressional committee claiming jurisdiction over aviation. It's a safe bet that extra appropriations will be voted the Civil Aeronautics Administration—just as they were after the 1956 tragedy, when two airliners crashed high over the Grand Canyon.

As a result, completion of CAA's five-year airways modernization program, slated for completion in 1962, probably will be stepped up to 1960. This program will give CAA controllers more radar "eyes." A longer-range program is expected to involve high-speed systems of communicating instructions to pilots, as well as collision indicators in aircraft to warn of danger and even take over controls to avert a midair smashup.

The ultimate answer, airmen agree, is to put every plane in the sky under positive control—that is, maintaining contact with an air controller on the ground who directs their speed, direction, and altitude, and is thus able to keep them apart. Government spokesmen agree that this ultimate system will never happen. In the first place, pilots of small aircraft have neither the equipment nor the proficiency to fly under tight control. More important, it is probably technically impossible to maintain control over that many planes moving at speeds ranging from 60 mph. to over 600 mph.

• **Progress**—However, the government can make a good case that it is moving rapidly toward practical goals. Now the Civil Aeronautics Board proposes to impose positive, mandatory CAA control over all air traffic—military or civil—at altitudes of 20,000 to 27,000 ft. on the transcontinental run on which this week's accident occurred.

Extension of the control plans to lower altitudes hinges on the planned installation of 73 long-range radars that will allow the air controllers to "see" every aircraft above a certain altitude. The Administration's current budget requests include \$25.6-million for this purpose, but as one CAA spokesman says, "It takes a year to get delivery on the equipment. And it takes a year and a half to train personnel to operate it."

Help for Rails

Administration and Congress offer rival aid plans—but railroad men aren't much impressed by the ideas.

Faces of the nation's railroad executives showed some signs of hope—but more of disappointment—this week. The reason for the hope: Chances began to look better for an emergency package of legislation designed to help pull the rails out of their economic quagmire. The disappointment was stronger, however, because many of the rail men regarded the package, in the words of one of their hard-pressed number, as "woefully inadequate."

But, however the rail men might view it, Congress and the White House appeared ready for a race to get credit for giving the rails a helping hand.

Sen. George A. Smathers (D-Fla.) got a head start. Smathers, chairman of the Senate's Subcommittee on Surface Transportation, after winding up almost four months of hearings, offered a recovery program featuring a government loan fund and tax aid.

On Tuesday, the Administration, through Secy. of Commerce Sinclair Weeks, responded. Weeks proposed four long-range steps and a fifth offering immediate help through government underwriting of loans for capital additions and for purchase of improved freight cars.

The railroad industry got a bit of chiding from both quarters on the grounds of poor management of its business, but government policies also got a share of the blame.

• **Rival Plans**—Weeks' and Smathers' programs overlap considerably in the long-range proposals. The big difference is in just how to give the railroads quick financial help. Here Weeks, with his plan all polished up, had a momentary advantage.

At midweek, Smathers was still rounding up subcommittee members to see how they liked his financial cures:

• A government-operated "railroad emergency loan fund" to help finance railroads that can't get enough money through ordinary channels.

• A construction reserve fund giving the rails tax deferrals in order to provide more working capital and, if needed, to stimulate later investment in cars, locomotives, and so on.

The first proposition—a government loan fund—could be worked by either of two methods, each with advocates within Smathers' subcommittee. A direct-loan agency with its own funds, similar to the old Reconstruction

Finance Corp., could be set up. Or, because some railroad spokesmen have objected to direct lending, the aid could be of the type Congress recently enacted for small airlines—with the government guaranteeing 90% of bank loans and the borrower responsible for the other 10%.

• **Weeks' Version**—The Administration's loan guarantee plan, and its other proposals, were outlined in a letter from Weeks to Smathers, backed up by a letter from Pres. Eisenhower.

The government—under certain conditions—would guarantee up to 100% of loans by private lending institutions, not to exceed a \$500-million total, for capital additions and improvement of rail plants, facilities, and some equipment.

On loans for freight car purchases, the government would guarantee not more than 10% of the purchase price, up to the \$200-million total.

• **Long-Range**—In their long-range proposals, both Weeks and Smathers would (1) give the Interstate Commerce Commission more authority to discontinue or curtail unprofitable rail services, (2) remove some trucking competition by preventing for-hire truckers from operating under the guise of exempt private carriers, and (3) stiffen the agricultural exemption which allows certain food-haulers freedom from ICC truck regulation.

Beyond that, each side offered an extra feature. Weeks proposed that federal rate-making policies should be revised to encourage more service and price competition, while providing adequate minimum regulation.

Smathers had been considering such a proposal, but delayed on it. However, he offered his own tasty pill—one for which the rails had been clamoring: repeal of war-imposed federal transportation taxes on persons and property.

• **Rails' Reaction**—Rail men appeared to be not much impressed with the Weeks package. Daniel P. Loomis, president of the Assn. of American Railroads, said it failed to deal with many railroad difficulties and treated others inadequately. Pres. George A. Alpert of the hard-pressed New Haven RR said the guaranteed loans would be of no help to a railroad like his, suffering from tremendous passenger deficits. Eastern rail men have been urging federal loans for working capital and operating needs as well as improvements.

Wall Street railroad security analysts also sniffed at Weeks' package as good only in parts, expressing disappointment especially at the failure to recommend repeal of transportation excise taxes. One called the proposals "sweeping some problems under the rug for a while." But all agreed there was hope for the rails in the change of attitude in Washington.

Court Reopens Miami TV Case

Appeals body sends disputed award of a channel back to FCC, but only under strict conditions. FCC will be able to recommend, but the court will have the final say.

TV Channel 10, Miami, may not be the most widely watched spot on the dial, but the battle for its custody is still making history:

• Six weeks ago, Federal Communications Commissioner Richard A. Mack resigned after charges that he had been unduly influenced in his vote to award the channel to Public Service Television, Inc., subsidiary of National Airlines (BW—Mar.8'58,p28).

• A month ago, the Federal Communications Commission asked the U.S. Court of Appeals, which was hearing an appeal by a rejected applicant—WKAT, Inc.—to allow it to rehear the case (BW—Mar.22'58,p69).

• Last week, the Court of Appeals granted FCC its wish, but only on terms that sent lawyers to their books in a vain hunt for a precedent. In no previous case, say the lawyers, has a court imposed such firm supervision on an administrative agency's fact-finding.

• **Agent of Court**—In effect, the three-man Court of Appeals makes FCC an agent of the court to rehear the evidence and to advise (1) whether the award of Channel 10 is void because of Mack's failure to disqualify himself from voting, and (2) whether any party to the proceeding should be disqualified "by reason of misconduct" from receiving a TV construction permit. Channel 10 is now running test programs from 7:30 a.m. to midnight, but FCC has not issued any license.

After the new examination, FCC is to recommend to the court whether the disputed channel should remain with the National Airlines affiliate or be given to someone else.

The court is hearing the appeal of WKAT, principally owned by A. Frank Katzentine, but other original applicants must also be allowed to participate in FCC's rehearing. These include North Dade Video, Inc., and WCKY of Cincinnati. Eastern Air Lines is to be permitted to renew its opposition to National's entry into TV.

• **More Than Asked**—The court-directed inquiry goes far beyond what FCC had asked. FCC had petitioned the court to send the case back without acting on WKAT's appeal, so the commission could decide what to do about the charges involving Mack's vote.

That was after testimony before the House Subcommittee on Legislative Oversight had shown that Mack had accepted "loans" and gifts from Thurman A. Whiteside, a Miami attorney

who supported the airline's application.

After hearing arguments, the three judges—E. Barrett Prettyman, George T. Washington, and John A. Danaher—took only a few hours to announce their decision. It is clear from what they said, both in their ruling and during the oral arguments, that they feel much more is involved than the fate of Channel 10, Miami, or the disqualification of a single commissioner. It affects the whole setup of regulatory agencies.

Judge Prettyman spoke of "an issue a lot bigger and deeper and wider . . . the integrity of the quasi-judicial process" itself.

• **Points to Settle**—Under the order to FCC to report its findings, the court retains jurisdiction of the whole case. Presumably, FCC is free to recommend final disposition of the case, but the court makes it clear that it intends to have the last word.

Without limiting the FCC hearing to these questions, the court requests answers on specific points:

• What circumstances formed the basis of charges that Commissioner Mack should have disqualified himself?

• Whether any person "influenced or attempted to influence" any member of FCC in the Channel 10 case except by "the recognized and public process of adjudication."

• Whether any party directly or indirectly "secured, aided, confirmed, ratified, or knew of any misconduct" that may have occurred.

FCC has six weeks in which to report its progress.

• **Legal Overseer**—In another unprecedented move, the court directed FCC to invite the Attorney General to take part in the hearing. Some observers see this as a suggestion that the Attorney General act as a "monitor" to help the court supervise the case. Others see it as a way of keeping the Attorney General informed on all developments. A federal grand jury is still investigating possible criminal violations.

No one knows, or will say, yet when the new hearing will start or even whether it will be before the full commission or a hearing examiner. In the original hearing, the examiner had recommended WKAT get the channel.

Meanwhile, Public Service Television will probably continue its program tests, but the commission may, in reporting to the court, recommend that the station be operated under a trusteeship until final decision is made.

Cops Brush Up on Yeggman's Art

Safemaker instructs New York police on modern methods of burglary, shows them how to draw clues from tools used.

About 200 policemen and detectives from safe and loft squads around New York got a four-hour demonstration from a top safemaker last week on current methods for burglarizing its own and other peoples safes and locks. Mosler Safe Co., which shares with Diebold, Inc., about 80% of the safe and vault business, showed the police just how easy it is to get through typical protection devices.

The star performer, Edwin F. Toepfer (below), is described by John Mosler, executive vice-president, as "a really great burglar, our franchised dealer in Milwaukee." Toepfer popped through wooden and steel doors, locks ranging from cheap padlocks to combination tumblers on safes as though they were so many simple puzzles. His tools—ranging from standard crowbars to hydraulic jacks capable of exerting a force of 50 tons or more, and magnetic drill presses equipped with the latest carbide-tipped drills—indicated that the capital investment involved in being a good burglar is going up fast.

Toepfer, a Midwesterner, demon-

strated some of the methods of forced entry currently popular around Chicago, compared them with Eastern techniques—which in some cases leave different "clue" marks.

• **Quicker Than the Eye**—The time it takes Toepfer to tear up typical locks or safes is an eye-opener, even though he operates under more ideal circumstances than a nervous thief. For example, he opens a vintage 1900 iron strongbox in 40 seconds; a chain latch in five seconds; a half-inch steel door with combination lock takes one minute with an acetylene torch, about two minutes with a drill and punch; and a new Mosler record safe—not intended for money—takes about three minutes.

"We're anxious to show customers, the police, and insurance underwriters just what protection actually is," Toepfer says. Modern money safes have special metal walls, which resist even carbide-tipped drills and acetylene torches, and they're pretty hard to jimmy open. It takes even an expert like Toepfer hours to get inside.

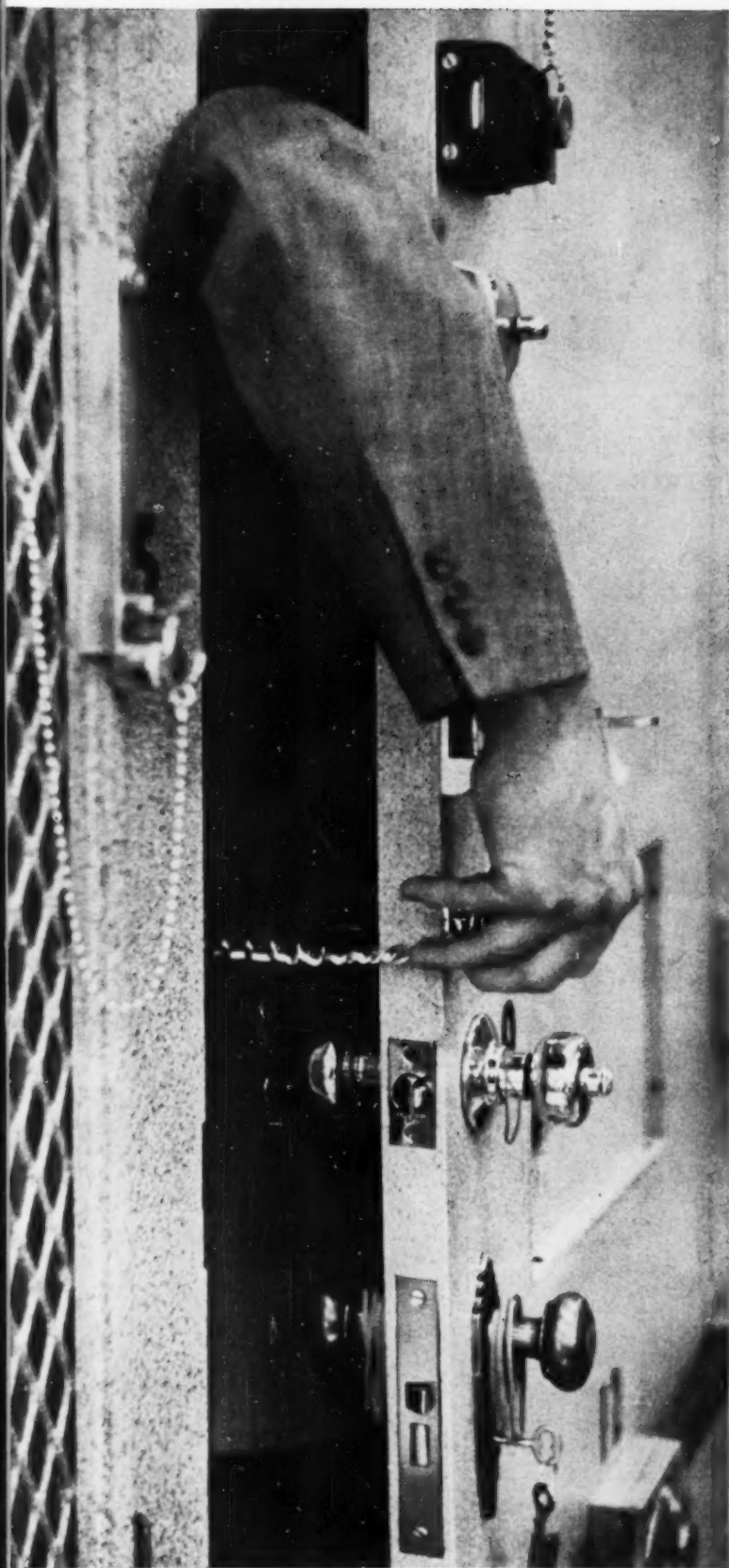
• **Premium**—Insurance rates take that into consideration. For \$10,000 coverage in Cleveland—the city with the highest burglary insurance premiums—it costs \$1,725 per year for insurance protection with an obsolete safe, and \$1,035 per year with the best commercial money safe.



TOOLS of the trade demonstrated range from common jimmies to saws concealed in canes, and hydraulic jacks.



INSTRUCTOR Edwin Toepfer shows a money safe that resisted attack even though it was carried from scene of burglary.



KNOB KNOCKING is the traditional first step in safecracking. With older safes, it only takes about 30 seconds to get inside.



DRILL is used if knob knocking fails. Richer burglars usually include an expensive drill with magnetic base in their kits.



SIMPLE PUNCH finishes the job after holes are drilled. A three-step opening job like this often takes less than five minutes.

DOOR CHAINS are one of easiest locks to manipulate, usually take only a few seconds. They offer little protection.

GE's Chairman Is Now the Boss



RETIRING chairman, Philip Reed, was subordinate to GE's president, but . . .



. . . NEW chairman, Ralph J. Cordiner, will also be chief executive. His spot as . . .



. . . PRESIDENT is being filled by his top lieutenant, 56-year-old Robert Paxton.

For the first time in 19 years, giant General Electric Co. this week got a new chairman of the board. Ralph J. Cordiner, 58, president since late 1950, advanced to chairman and chief executive officer. As part of the same shuffle, Robert Paxton, 56, stepped up from executive vice-president to president.

The appointments were announced after GE's annual meeting, which this year drew a record crowd of close to 4,000 stockholders to Schenectady's National Guard Armory (pictures). They reflect a significant change in

GE's top management structure—until now, the chairman has been subordinate to the president, and the company bylaws had to be revised to make the chairman also the chief executive officer. The new setup makes no essential shift in the relationship between Cordiner and Paxton, as his first lieutenant, except for the change in titles.

Thus, in his new assignment, Cordiner will more than fill the shoes of 59-year-old Philip D. Reed, chairman since 1939, who some time ago disclosed his plans to retire from the job this year



GE STOCKHOLDERS almost 4,000 strong, flooded into Schenectady's Armory, heard plans for hard-selling "Operation Upturn," the company's new remedy for recession.

A MANAGEMENT REPORT



SINCLAIR CHEMICALS . . . MADE FOR MODERN LIVING



by JOHN A. SCOTT, President
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"Sinclair's approach to petrochemicals is a selective one. We concentrate on large volume chemicals produced by upgrading low value refinery materials. These are chemicals used by the growing industries keyed to modern products, such as the synthetic fiber and plastics pictured here. Our approach has worked well. A new unit Sinclair Refining Company is building will, with existing facilities, make us the *world's largest marketer* of paraxylene, an ingredient of fibers and plastic films. We are now supplying the main component of a new plastic from the nation's *first commercial* high-purity propylene plant. With judicious market studies and imaginative process research, we are building our products list. Sinclair anticipates a profitable chemical future."

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and to sever all connections with GE in 1959. For the rest of the year, he will head the company's finance committee.

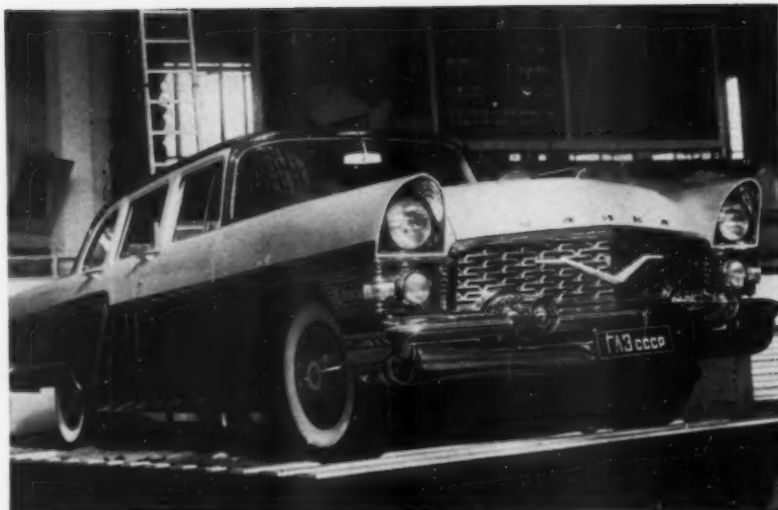
• **Industrial Man**—Almost all of Paxton's experience has been in the industrial side of the company—which is currently doing a good deal better than the consumer appliance business. He is, in fact, the first GE president in almost 40 years to come up via that route. He was in charge of the Industrial Products and Lamp Divs. and later an executive vice-president responsible for the apparatus group, which makes such items as giant turbines. Then, in a major reorganization last fall, GE concentrated operating power in one executive vice-president and gave the post to Paxton (BW—Oct. 5'57, p48).

The four operating group vice-presidents who had been reporting to Paxton under that setup will continue to do so, for a while at least. There's no sign yet whether his old job will be filled.

• **Worst Over?**—At the stockholders' meeting, Cordiner announced a campaign called "Operation Upturn" to improve GE's sales over the next six months. Like most of the rest of the industry, GE has been slipping so far this year from 1957's record levels—for the first quarter, sales were off about 8%, earnings off 23%. Nonetheless, Cordiner told the shareowners, March and April orders suggest the worst may be over. And even in the first quarter, he added, most of the company's business held up well. Its backlogs of utility orders—particularly for turbines—are as fat as last year's, and it has won a number of important new defense contracts.

Despite the gloomy spots, Cordiner insisted the solution lay in the proper approach by business, rather than in "sitting back and relying on government stimulants—increased spending, meaningless tax cuts, deliberate inflation, or any other economic sleight-of-hand." Both lay and industrial consumers have plenty of money with which to buy, he contended, but they want to be wooed more effectively.

• **No Price Cuts**—GE apparently will do its wooing through "Operation Upturn," which, as Cordiner described it, will be a blend of the hard sell, product improvement, easier credit, and tighter internal operations. Details of the program, to last until about mid-December, will be left to GE's 100-odd decentralized divisions. But Cordiner did make plain that it would not be based on lower prices—which, he argued, are already as low as they should be. In fact, he came out strongly for considerably higher price tags on most of the company's lines, if only market competition would allow.



Russians Fancy Up Their Cars ...



... Get That Two-Tone Look

Are these American cars?

In style only. They are two of four new-model cars Russia is showing off at the Brussels Worlds Fair, which opened last week. Moscow rates them highly—it has placed them near the center of its huge pavilion, close by models of Sputniks I & II.

The Ford-like Chaika (top picture), with seagull insignia, has a two-tone light green and white body, a wrap-around windshield, sleek interior, and gold-colored front grille. It's going into production at the Gorki Automobile Works—located in the city of Gorki, east of Moscow—to replace the well-known Zim car. The Zim supposedly sells for around \$10,000.

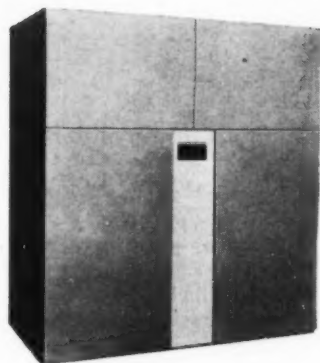
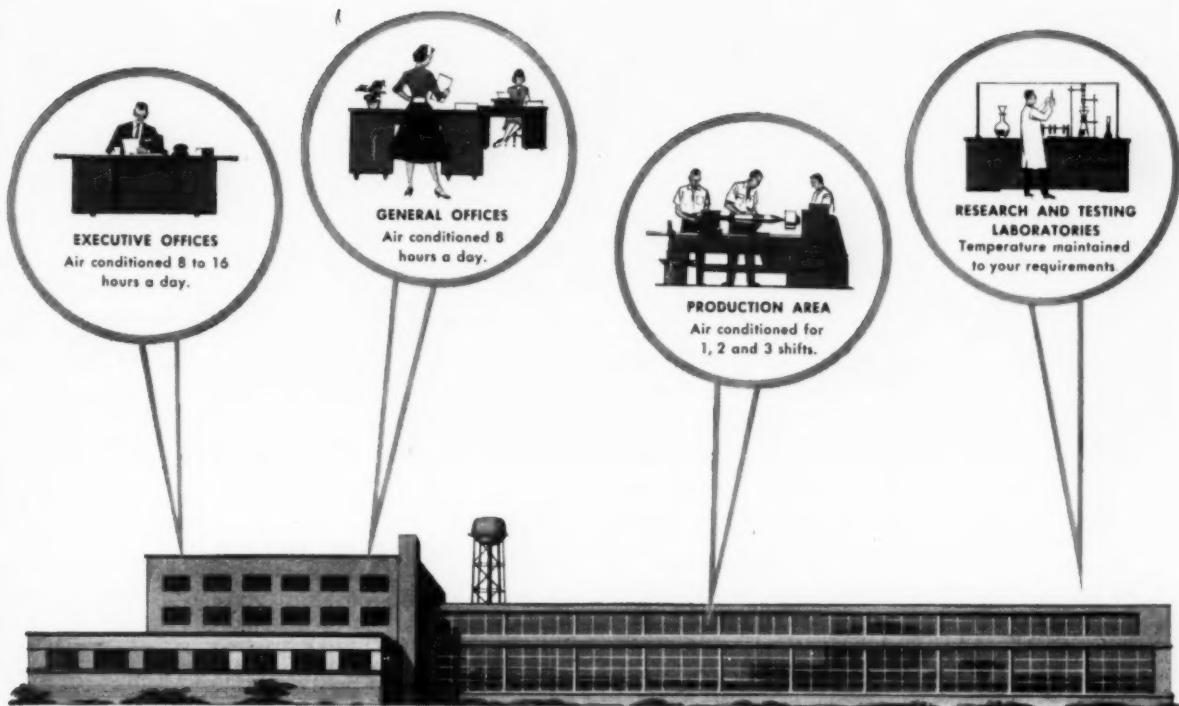
The bigger, heavier Zil 111 (lower picture), which has Chrysler-Buick lines,

is slated to replace the Zis 110, the limousine used by top Soviet officials. Here again the Russians have departed from somber black—the usual color—and produced a two-tone job in blue. (It's called the Zil, instead of Zis, because in the de-Stalinization campaign, the Stalin Works in Moscow became the Likhachev Works—after Russian auto engineer Ivan A. Likhachev.)

Soviet officials at Brussels hint that the spruced-up, chrome look on these cars—and the smaller Volga and Moskvich, also on display—is partly to help export sales.

When asked by a Soviet car designer about Detroit's latest trends, an American at Brussels replied: "We're getting rid of chrome." The Russian was dismayed.

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• • •

Living Costs Shoot Up Again in March With Food the Major Villain

The Labor Dept.'s Consumer Price Index rose steeply in March, hitting 123.3% of the 1947-1949 average, compared with 122.5% in February and 118.9% in March a year ago.

Food prices were the biggest factor in the climb, jumping to 120.8% from February's 118.7% and topping the year-before March by 6.7%. The costs of housing, medical care, personal care, reading, and recreation also moved upward.

• • •

Sears, Roebuck Seeks to Break Up Block of Stock Held by Employee Fund

Sears, Roebuck & Co. management is asking stockholders at the May 12 annual meeting to approve a break-up of the 19.5-million voting shares that are in its employee pension fund. It feels the block—26% of outstanding stock—is too big to be voted by six trustees.

Sears proposes distributing the stock to the individual employees who belong to the profit-sharing and savings fund. About 135,700 of the company's 220,000 workers are covered by the fund, but 75,000 of them own 95% of the fund's shares. Sears stock makes up \$500-million of the fund's \$700-million assets.

Under the new plan, employees with vested rights, acquired after five years of participation, would vote their own stock. The six trustees—two Sears directors, two officers, two employees—would vote the remaining shares and any vested stock not otherwise voted.

• • •

Chrysler Board Due to Study Plan For Shaking Up Marketing, Production

Chrysler Corp.'s board of directors was slated to come to grips late this week with a long-awaited reorganization plan aimed at putting steam in marketing and taking some of the high costs out of aging production facilities.

Key points in their planning involve:

- A top management post directly under the chief executive officer.
- An end to separate administration of the De Soto Div., although the De Soto nameplate will continue, with its own sales force.
- A new marketing chief to succeed James Cope, who quit last month in a disagreement over execution of marketing plans.
- Half a dozen shifts in the executive structure.

Chrysler has long known it ought to do something

about its oldest facilities, and the weak sales of the 1958 models have served to overcome the company's reluctance to upset employees and communities. Last month, Chrysler telegraphed the punch with the announcement that 1959 De Sotos would be assembled at the Chrysler plant and that engine building would be concentrated in two newer plants (BW—Mar. 22 '58, p38). Now, all engine production will probably be put under one vice-president, all assembly under another.

As for marketing, Chrysler's troubles arose from dualing Plymouth with other cars, which long prevented concentration on what should have been the volume car. The new system, and the executive structure, are likely to combine features of both Ford and General Motors.

• • •

The Trade-in Comes to Airplane Market To Meet High Cost of Jet Transports

The trade-in—staple competitive weapon of earth-bound dealers in autos and appliances—is being brought to the airplane field by the pressures of the jet age. It gives the makers of jet transports, battling to dominate the new field, a competitive means of easing the financial stringencies of their customers.

One such deal—though the word “trade-in” is avoided—has just been revealed by Boeing Airplane Co., though it dates back to 1956. Boeing in effect agreed to take back 14 Stratocruisers from British Overseas Airways in part payment for 15 of Boeing's 707 jet transports that BOAC ordered.

Disposal of the Stratocruisers will be handled for Boeing by Babb Co., Inc., of Linden, N. J., a major worldwide broker in used and surplus planes.

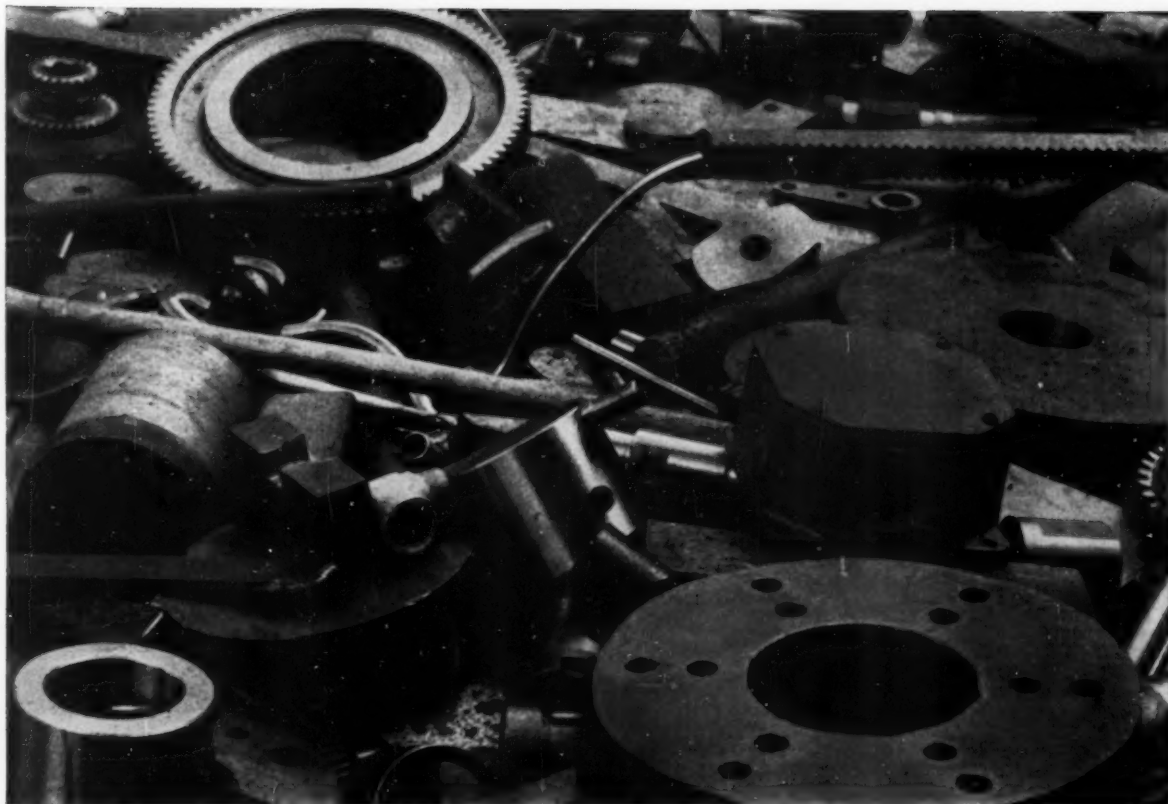
Fairchild Engine & Airplane Corp., whose 40-passenger turboprop F-27 is the first plane designed specifically for feeder airlines, is now working on a 15-passenger transport to feed the feeders. It's needed, says Fairchild, because the feeders are now shying away from low-traffic stops in the deep weeds, just as the big transports shunned the feeder terminals.

• • •

Nuclear Production of Industrial Heat At Competitive Cost Sought By Lockheed

Lockheed Aircraft Corp. has set up a new branch, Georgia Nuclear Laboratories, to design and build nuclear reactors for the production of industrial heat. GNL, which will have manufacturing space at Lockheed's Marietta (Ga.) plant, will also design and make research reactors and small atomic power plants.

Atomic furnaces have long been studied as a source of process steam and space heating, but have run into the same snag as electric power reactors: Their costs have been much higher than furnaces using conventional fuels. Now, GNL says its preliminary studies indicate it can produce competitive industrial heat.



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WASHINGTON OUTLOOK

WASHINGTON
BUREAU
APR. 26, 1958



How fast will federal spending rise?

That is Washington's top question now, as the Democrats and Republicans wrangle over whether Pres. Eisenhower is doing enough to halt the business slide and get things on the upgrade by fall. Whether you get any general tax relief this year is deeply dependent. So, take a look at the available facts.

Eisenhower sees months more of softness—meaning the second and third quarters, then the beginning of a rise.

The President's reliance is on two stimulants—credit and spending.

Note the Federal Reserve's latest move—a still cheaper borrowing rate for member banks and another cut in reserve requirements. Each is intended to increase the amount of lendable funds in the banking system. Borrowing rates are inching off, as a result.

The spending rise is getting new publicity. The Administration soft-pedaled this for a while—officials helped reporters guess privately (BW—Apr. 5 '58, p30). But now, they are putting spending rise estimates on the record.

For perspective, start with the January budget. It put the expenditures for this fiscal year, which ends June 30, at \$72.8-billion, and scheduled \$73.9-billion for the following 12 months, fiscal 1959.

Look at what's happening to this year, fiscal 1958. In the first nine months, spending totaled \$53.3-billion, or fairly close to estimates. The figuring now is that the April-June quarter will show a very sharp rise—hit an annual rate of \$78-billion. The deficit may hit \$3-billion.

The projection for the next year is for a continuing increase, with an annual rate in excess of \$80-billion six to nine months from now. On the deficit side, this means some \$8-billion to \$10-billion of red ink.

It is a picture that must be pieced together. But it's what you get when you take the statements made during the past week by Budget Director Stans, Treasury Secy. Anderson, and Reserve Board Chmn. Martin. No two appraisals jibe completely. But when all are considered, it's hard to escape the conclusion that government spending is on the verge of the sharpest rise it has ever taken, except in hot war.

Democrats are skeptical—unwilling to take the figures at face value. They charge White House politics, aimed at halting a general tax cut.

The deficit is what worries many members of Congress. Both Democrats and Republicans have been eager to vote spending increases in the name of anti-recession measures. The fear now is that they have gone so far on the spending front that they can't give tax relief to their voters.

So, Democrats question the spending figures. They make much out of the fact that the January-March quarter, the last period for which spending totals are available, is far below what is now being forecast for the April-June period. You will see this questioning become a major issue as other so-called anti-recession measures are debated.



As for a general tax cut, don't bank on it.

WASHINGTON OUTLOOK (Continued)

WASHINGTON
BUREAU
APR. 26, 1958

The Democrats may force a showdown. There's no certainty that they will. But they are moving in that direction.

Congress wants to get the issue settled. Some businessmen complain to their congressmen that the current uncertainty is hard to live with. The point they make is that consumers hold back, especially on items that carry high excises, such as autos and household durables. And then, the question of what happens to income taxes figures in decisions on whether or not families have the money to buy. A tax cut is like a wage rise.

The White House wants to wait—see what happens. If it does buy a tax cut, it will do it reluctantly. One man close to Eisenhower is positive that the President will not support a general tax cut this year. His only out is a new and sharper business downturn at a time when the official guess is that the recession is close to the bottom.

The next 30 days may tell the story on a general tax cut. Speaker Rayburn and Senate Leader Johnson have an understanding with Secy. Anderson that each side will get 10 days' notice of any change in White House or Congressional plans.

Eisenhower will take a stand on May 20; he is slated to make a major economic address at that time. Associates predict he will take a hard and fast stand on the tax issue then. He might leave the door open for some tax revisions, which would mean giving up some revenue in order to get rid of some excise levies and taxes that discourage investment.

What if the Administration has miscalculated and business fails to level out in the summer and show a fall upturn? Then all bets will be off. The Administration is prepared to shift gears quickly.

A general tax cut would get backing. Emphasis would be on a cut for consumers—lower income rates. Politics would require this.

But there would be incentives to business, too. The corporate income rate might be cut from 52% to 50%. Investors might get better treatment. One plan would increase the amount of dividend income exempt from income taxes. A companion idea would cut the 25% rate on capital gains to 12½%.

—●—

Liberalized unemployment pay will be voted. The issue is how far to go in paying people who are not working. The Democrats are threatening to vote more than the President will go along with. A veto is a prospect.

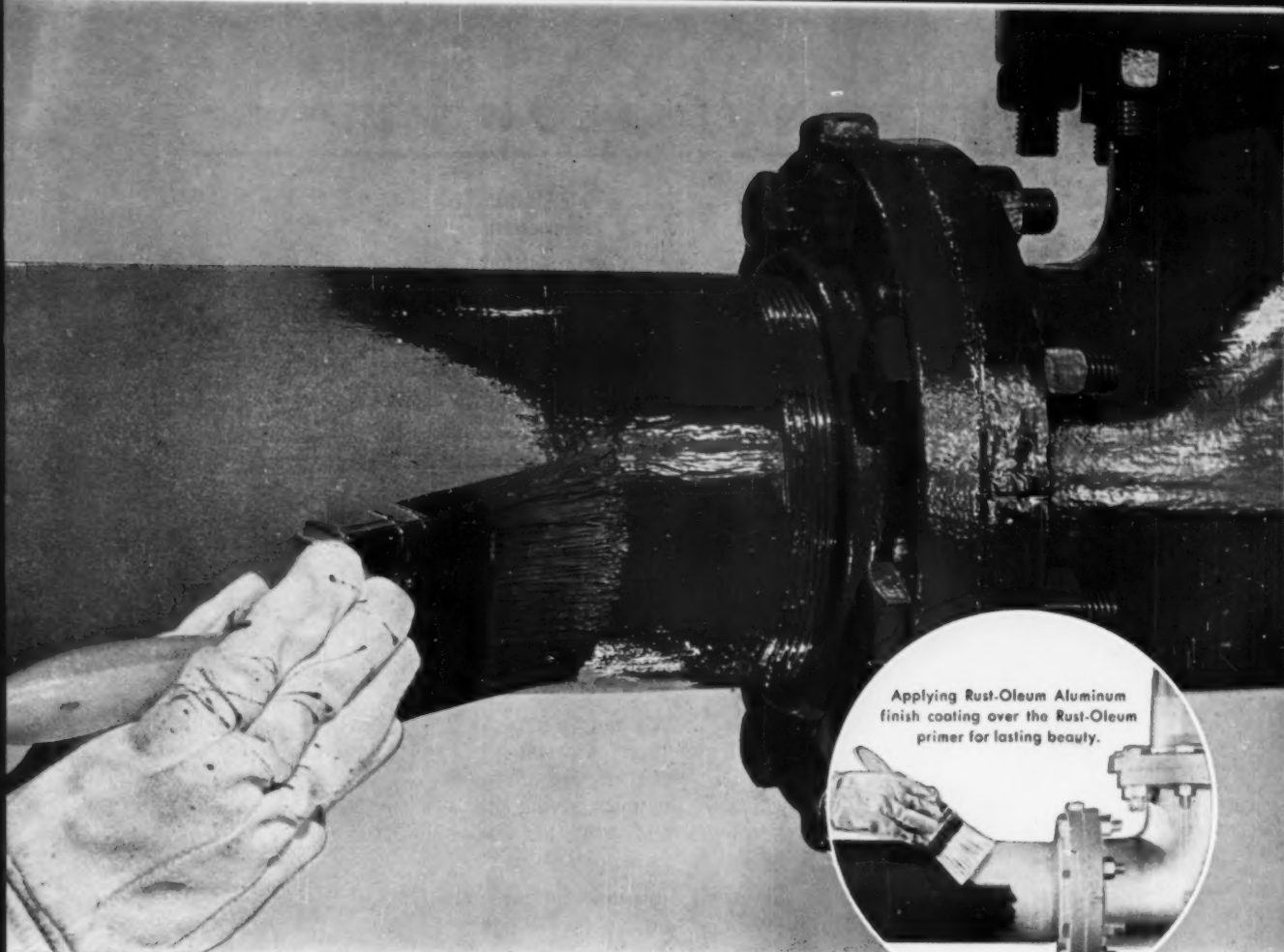
But don't look for any big new public works program. The White House has made its position clear. It will go along with projects that can be stepped up now, and oppose programs that have long lead times. You saw this decision in the flood control bill veto.

—●—

Note the political claims of the week.

GOP Chmn. Alcorn writes off the Senate—sees no chance that the Republicans will win a majority in the fall. He's right on this. But most observers say he's wrong on his prediction that the GOP will win the House.

Democratic Leader Butler is given more credence. He predicts new gains for the Democrats in both the House and Senate. It means that you will be living under a divided government for two more years—a White House that can proclaim policy and an opposition Congress that can write it.



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Steel's Built-in Pay Boost

● Industry, in throes of slump, quakes at prospect of 20¢-an-hour rise called for by contract for July 1.

● Steel executives don't want to propose it, but they would welcome a deal with the Steelworkers to hold the line on wages, prices.

● Right now, the union is standing pat, but a deeper recession just might bring concessions.

Recession or not, steel's labor costs will go up about 20¢ an hour July 1 under deferred raise clauses negotiated in 1956. This prospect has been worrying the industry for some time. Its leaders hope for a business pickup in midyear, but they are afraid that a marked rise in prices and costs at that time might have a sharp, retarding effect.

Up to now, for psychological reasons, the worries have been kept quiet, held to some very informal discussions among individuals—and not involving any meetings. But it's no secret that the concern is there and that it is growing daily. Last weekend, it was obvious in Pittsburgh that many industry leaders were hoping someone would come out into the open with proposals for an "anti-recession" deal with the United Steelworkers.

• **Coincidence?**—Perhaps it was coincidence that someone did this week. Harold J. Ruttenberg, president of the Stardill-Keystone Co., in Beaver Falls, Pa., addressed letters to David J. McDonald, head of the Steelworkers, and Roger Blough, chairman of the board of the United States Steel Corp. He urged:

"You each have a responsibility to change fixed policies with changing times, and not inflict on our country a wage program that was formulated in 1956 and will throw more people out of jobs this year unless it is altered." Ruttenberg proposed:

• The 20¢-an-hour increase in wage costs scheduled for this July 1 should be postponed until July 1, 1959.

• The steel wage contract scheduled to expire next year should be extended to July 1, 1960.

• Current posted steel prices should be extended to July 1, 1960.

• The present formula granting automatic wage increases as the cost of living rises should be discarded.

Ruttenberg suggested in his "Dear Dave and Roger" letter that unless the industry and union avoid a "big rise in steel wages with a sharp effect on steel

prices," the impact in July "can further depress the basic steel industry, and drop our country out of a recession and into a depression."

This is much the same thing that other industry people have been saying in Pittsburgh. For instance, before the release of the Ruttenberg letter, a major steel official said privately that his company would be willing to forego any price increase this year if the Steelworkers would give up its wage and fringe increases.

• **Not Only Steel**—Concern over built-in wage increases in long-term labor contracts isn't limited to the steel industry. Just recently, Edward L. Cushman, vice-president, industrial relations for American Motors Corp., cautioned against negotiating new deferred wage increases.

"With the economic outlook as uncertain as it is, it's unwise to shackle any company with an obligation to give automatic annual wage increases," Cushman said.

Similar views were expressed this week by spokesmen for auto parts manufacturers and tool-and-die shops. Although many of these smaller companies do not have "auto pattern" contracts with the United Auto Workers, more than 50 that employ about 80% of the parts and tool-and-die workers traditionally accept Big Three terms. This year, reports in Detroit say, many of the pattern-followers plan to "try and get annual raise and cost-of-living monkeys off their backs."

This is equally true in the farm machinery and equipment industry. Many employers say they are afraid to commit themselves to future raises that might not be warranted by business.

• **GE Concerned**—In electrical manufacturing, major contracts call for automatic "productivity" wage increases of from 5¢ to 10¢ an hour (averaging about 7¢) later this year. So far, Westinghouse Electric Corp. has found its five-year contracts signed in 1955 have had an "over-all cost . . .

somewhat higher than expected," but that otherwise they have been "advantageous to our employees, our customers, and the company."

General Electric Co., on the other hand, says that while it will live up to its long-term contracts with deferred raises "in letter and in spirit," it now feels that the negotiated wage and benefit provisions extending to October, 1960, were a mistake and are dangerously inflationary.

• **Focus on Steel**—The focus of interest in attitudes toward long-term contracts is on the steel industry. The auto industry is negotiating new agreements this year and there is almost no chance that built-in wage increases and quarterly cost-of-living adjustments will be dropped from major contracts if the terms extend beyond a year. Before bargaining, General Motors offered UAW an extension of its present contract with all of its deferred gain provisions kept intact.

Electrical manufacturing leaders have only limited bargaining this year. Of other industrial groups with long-term pacts, steel is hardest hit by provisions for substantial increases for workers.

This year, the second year of the three-year steel contracts, workers are due a basic 7¢ hourly raise—plus increases in the increment between mill job classifications that will bring the average raise to more than 9¢ an hour, and that will mean 13¢ added to paychecks of the highest-skilled workers. In addition, the "package" due this year includes an increase in shift premiums, higher pay for Sunday work and for holidays, and, probably, another cost-of-living pay hike.

• **Industry Down**—This means a big jump in labor costs, particularly in a period when industry operations have slumped below 50% of capacity and when 250,000 steelworkers are unemployed and an estimated 350,000 are working less than 40 hours a week.

Ordinarily, it would also mean a boost in steel prices. In the past, the industry has maintained consistently that a wage increase must be supported by a price hike. Most steel people haven't said anything specific about the prospects for this year, beyond Ruttenberg's cautious reference to the "sharp effect on steel prices" when wages go up.

But, all factors considered, the steel industry is reported pretty sick of the three-year agreement, and it wonders whether some of its provisions for increases are defensible at this time.

Unless the union is willing to re-

THE TRADING STAMP:

Over half of the non-stamp supermarkets have lowered food prices because of the trading stamp's competitive pressure

Consumers have benefited from trading stamps in both stamp and non-stamp stores. When a leading research organization recently made a national survey among the managers of 541 supermarkets that do not give stamps, they found that more than half of them (51.5%) had reduced prices to compete with stamps.

At the same time, supermarkets that give stamps have remained competitive within normal price ranges. With increased volume paying for the cost of stamps in most instances, stamp stores have been able to maintain prices, or even lower them. According to studies by marketing experts connected with universities, there is no evidence that stamp stores, as a class, charge higher prices than non-stamp stores.

Thus, the trading stamp can be counted among the anti-inflationary forces operating on

food prices. At a time like the present, when there is upward pressure on the prices of everything, it seems we need more and more competitive forces, like trading stamps, in the marketplace.

* * *

REFERENCES: "Status of Trading Stamps in Food and Drug Stores." Selling Research, Inc., New York, 1957.

"Competition and Trading Stamps in Retailing." Dr. Eugene R. Beem, School of Business Administration, University of California.

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negotiate, there's nothing to be done about changing the terms. The big companies wanted a five-year pact in 1956 (USW didn't want a long-term agreement) and won a compromise three-year term in hard bargaining. They are stuck with it now—and know it.

• **Union Position**—The Steelworkers says flatly, now, that it won't agree to

give up any of the 1958 gains provided by its contracts. I. W. Abel, secretary-treasurer of the union, commented recently:

"The union couldn't do that, and I don't think that there is any serious expectation on the part of the steel industry to sit down with us and say, 'Let's skip the pay raise this year because of conditions.'"

A lesser union official said more bluntly that USW officers who were challenged in the last election know they would be kicked out of their jobs if they accepted anti-recession measures that would mean no raises in 1958.

At the same time, the possibility that USW will revise its thinking before July can't be ruled out entirely.

Recession Is AFL-CIO's Big Worry

State of the economy dominates the federation's thinking as its executive council meets. This means labor's program must continue to be one of "dynamic conservatism."

Next week's AFL-CIO executive council meeting is expected to continue the pattern of "dynamic conservatism" that has been characteristic of federation policies since AFL-CIO was created by merger in late 1955.

For more than two years, the federation and most of its affiliates have concentrated their attention on consolidating and preserving the gains won by organized workers through years of aggressive union action. This has been a defensive program—forced in part by the lingering problems of welding together the old AFL and CIO, in part by crime and corruption revelations in Senate hearings, and in part by the economy's slowdown.

• **Solid-Cored**—Now, AFL-CIO merger troubles largely have been cleared away. Dissatisfactions remain—and probably there always will be some. But, today's AFL-CIO is more solid-cored and cohesive than it's been at any time since the merger. Nobody is worried over serious cracks in its structure or is talking about a possible breakaway of alienated groups—as they were as late as February.

On the other hand, the problems caused by the changing times are as worrisome as ever. They dominate the federation's thinking and planning. And they occupy a major part of the executive council's agenda for its spring meeting in Washington next week.

• **"Damned Worried"**—The state of the economy has AFL-CIO affiliates "worried—damned worried," a federation spokesman said in Washington last week. Although industrial unions are hardest hit by layoffs (BW—Apr. 19 '58, p. 89), the concern isn't limited to any particular group of unions.

Representatives of 30 unions met recently on an occasion not even remotely connected with the economic downturn. However, talk soon shifted to the recession. Officials of all of the unions—including the crafts—expressed their concern and demanded immediate

"anti-recession action to prevent unemployment from feeding on itself," according to AFL-CIO.

Federation economists are expected to tell the executive council next week that the number of jobless may rise "well over the 6-million level" in June and July, topping the crisis figure cited by Labor Secy. James P. Mitchell in the early period of the downturn.

At the same time, these economists will estimate at \$1-billion the increase in income possible under Administration proposals "either passed or reasonably expected to pass." They contend that this is "just a drop in the bucket" considering the estimated \$15-billion decline in the economy so far.

• **Tax Cuts Urged**—The quickest solution to present economic ills would be a tax cut, AFL-CIO contends. The executive council is expected to support a proposal by Pres. George Meany, who wants the personal exemption boosted from \$600 to at least \$700. Walter Reuther, an AFL-CIO vice-president and head of the United Auto Workers, strongly advocates a moratorium on withholding taxes as a quicker way of releasing money.

Generally, the pre-meeting consensus of the council is that the Democrats must be blamed along with the Republicans for the failure to act "promptly and effectively" to stop or slow the slipping economy. This will be reflected in the council's plans for fall political action. Several members urge more independence from Democrats and "true bipartisan policies."

Although AFL-CIO council members will consider a long list of legislative proposals, their attention will be primarily on recession measures. However, they won't ignore foreign affairs, and have invited Dean Acheson, former Democratic Secretary of State, to meet with them to discuss U.S. policy. As in the past, the council will take what is basically a traditional liberal position

on international trade—although unions individually are beginning to veer away from "free trade" views as imports create worries of lost jobs.

• **Blast at Probers**—The second big issue on the council agenda—relegated to second place only because the economic situation is so important to labor—is the McClellan committee. Originally, restrained by Meany, AFL-CIO gave its grudging support to the Congressional probers into labor crime and corruption.

The restraint is now off. From Meany down, the federation's policymakers are disturbed and angry over the Senate group's probing into the UAW strike against the Kohler Co. and the committee's interim report.

Meany criticized the report for "biased and unfounded conclusions" when it appeared. Even stronger words will be used next week. Although the federation acknowledges that the McClellan investigation helped labor by pin-pointing "crooks and racketeers" in unions, it contends that the probers should devote more time and energy to probing management crime and corruption—and should stay out of such labor-management situations as the UAW-Kohler dispute.

Meanwhile, AFL-CIO's own policing body, its Ethical Practices Committee, is expected to report next week on investigations into affairs of the Jewelry Workers and the Operating Engineers. The latter union recently received valuable support from Meany, who said that he is confident that under its new president, Joseph J. Delaney, the union is "going ahead on the right path" and will "do its part in meeting [ethical] problems" raised by McClellan investigators. Meanwhile, the executive council must decide what—if any—further steps should be taken at this time against two other unions, the Distillery Workers and the United Textile Workers, ordered to clean house or leave AFL-CIO. And it faces a possible question of whether Maurice Hutcheson, president of the Carpenters, is in full compliance with federation-set ethical standards. Hutcheson's activities in an Indiana highway

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right-of-way deal are under investigation.

• **Inside AFL-CIO**—The last executive council meeting, in February, ordered all AFL-CIO affiliates to comply with the federation's six codes of ethical practices by Apr. 15. On that deadline, a "great majority" of the 130-odd unions were "in compliance or coming into compliance," AFL-CIO said.

Some others haven't held board meetings or conventions since February, and haven't been able to take the necessary steps. But "no unions have refused to comply or questioned the order to do so," a federation spokesman said; he added, "the presumption is that all will comply, in time."

This is significant of the change within AFL-CIO. To comply with the codes is to concede to the federation a large measure of authority over its "autonomous" affiliates—a concession strongly resisted in the past.

In the same general area of acceptance of controls, David L. Cole, the AFL-CIO umpire of jurisdictional disputes, is expected to report "satisfactory" operation of new and broader rules covering inter-union relations.

Resistance to AFL-CIO pressures is continuing, however, in state organizations. So far, although AFL and CIO union bodies were supposed to complete mergers by last December, only about 36 state consolidations have gone through—with two territorial mergers bringing the total number of successes to 38. Progress is reported in a number of the dozen states where mergers haven't been effected. Under the circumstances, the council is expected to leave to Meany the decision to tighten pressures or to let the remaining state organizations—most in highly industrialized states—have a little more time.

• **Curtailments?**—AFL-CIO faces questions of whether further curtailments in operations may be forced by reduced per capita income from affiliates. On the other hand, it is expected to authorize a \$700,000 radio and television expenditure during the next year to counteract the adverse public relations effects of the Senate probe, high prices blamed on union economic drives, and "union monopoly" charges raised, particularly, by proponents of right-to-work legislation (BW—Apr. 12 '58, p130).

The plans for the campaign to tell the union story (\$400,000 for radio, up to \$300,000 for TV) prompted one council member to remark, glumly: "Now that is another example of AFL-CIO's so-called 'dynamic conservatism' today. See, we're planning a campaign to defend what we have and are. A few years ago, it would have been to fight for a higher minimum wage, more social security, a lot of new gains. We're not talking very much about those things now." **END**

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NLRB Sets New Precedent

● Board reverses policy in its earlier Loewenstein case to rule that a union cannot escape a representation election by neglecting to file non-Communist affidavits.

● The ruling comes in a five-month strike in Toledo department stores, where the Retail Clerks concede they don't have majority support. Election is set for next week, but the union is fighting in court.

● Meanwhile, picketing continues at Lasalle's a Macy store that is the union's chief target.

The bitter five-month strike in Toledo by the Retail Clerks International Assn. against the Macy-owned Lasalle's department store (BW-Feb. 8'58,p86) is fast becoming one of the landmark test cases of the National Labor Relations Board.

Last week, NLRB overturned a 10-year-old precedent to grant a request by the Lasalle management for a representation election even though the Retail Clerks haven't complied with the Taft-Hartley Act. In the precedent Herman Loewenstein Inc., case, the board ordered a union removed from the ballot in a representation election because it failed to file non-Communist affidavits.

• **Consequences**—As a result of the change of policy:

• The five members of NLRB wound up in U.S. District Court in Washington this week as defendants in an injunction action brought by RCIA to bar the board from conducting the Toledo election, set for Apr. 30.

• The union collected more than 400 signatures of Toledo union officials and members to petition Congress for an investigation of NLRB. The union charges that the board exceeded its authority, is prejudiced in favor of management, and "leaked" its decision in the Lasalle case to Macy management in advance.

• Employers who bargain with unions that haven't complied with T-H—and who doubt that these unions represent a majority of their employees—can now request an NLRB election to determine the non-complying union's status. However, when unions are petitioners, they must, as before, have complied with T-H filing requirements.

The Lasalle strike started Nov. 23 when 10 unions with jurisdiction in downtown Toledo department stores walked out. The walkout affected only Lasalle's, although the unions claimed they were also striking against two other

stores. All three stores are members of a bargaining association—Retail Associates, Inc.

On Nov. 25, the unions filed with NLRB an unfair labor practice charge against Lasalle's, claiming that the store had refused to negotiate despite a 21-year record of collective bargaining with the unions. The unions also maintained that the resignation from the management group of a fourth store, Tiedtke's, had broken the association and, therefore, that bargaining should be on an individual store basis.

Three weeks later, the nine other unions settled with Lasalle's and returned to work, leaving the Retail Clerks to go it alone. The other union leaders argued that, facing a management request for a representation election, it was best to return to work so that striking employees would be eligible to vote. They pointed out that there was precedent for NLRB to exclude strikers from the ballot.

• **Lull Before Storm**—For nearly four months, nothing was heard from NLRB. Then, two weeks ago, the board moved swiftly to set the stage for the current controversy.

On Apr. 7, the board's general counsel dismissed the unfair labor practice charge against management on the grounds that a three-store bargaining unit was appropriate.

On Apr. 8, the board, at the union's request, heard day-long oral argument by both sides on the multi-bargaining questions and on the eligibility of two Toledo locals of RCIA to be on the ballot at all. The two local unions deliberately refused to file non-Communist affidavits by Jan. 1, expiration date of the old affidavits, although they had done so in the past. The union officials had signed affidavits but had kept them under lock and key in Toledo. Presumably, they hoped to block the NLRB election by this strategy.

The next day, NLRB ordered an election to be held within 30 days and

on a three-store basis. The board also ordered voting confined to employees on the store's payroll for the period immediately preceding Apr. 9, thus excluding the strikers from the vote.

While practically all of the two-page decision referred to the specific strike in Toledo, a brief footnote seems, in the long run, to be the most significant part of the decision.

It reads: "The board has decided to, and hereby does, overrule the Loewenstein Doctrine' (75 NLRB 3751) and therefore in this RM proceeding is placing the name of the non-complying union on the ballot." One member, Stephen H. Bean, would adhere to the board's decision in Loewenstein.

The majority decision means, of course, that employers can turn to the NLRB for a representation election whenever they think non-complying unions do not represent a majority of their employees. And a union cannot use non-compliance as a dodge to avoid a showdown.

• **Basis for Decision**—The Lasalle ruling apparently is an extension of a recent Supreme Court decision in the Bowman Transportation case. The court held that the board may order an election that would include a non-complying union, in certain unfair labor practice cases (BW-Feb. 8'58,p91).

However, RCIA immediately attacked NLRB's Lasalle decision, contending that the board could not have given thorough consideration to oral arguments heard less than 24 hours earlier.

"The board had their decision in their back pockets while sitting on the bench hearing oral arguments in the case," a top RCIA.

• **Hope in Court**—In taking the case into federal courts, the union has high hopes of ultimately winning their strike on the basis of law. "Our chief hope for victory lies in the courts, not picketing here on the sidewalk in Toledo," said Sam Meyers, RCIA international vice-president.

If the election set for Apr. 30 isn't blocked, the union plans an appeal to the U.S. Court of Appeals and, if necessary, to the Supreme Court. It will argue (1) that NLRB incorrectly interpreted the powers granted it under Taft-Hartley in determining the election unit and (2) that the original Loewenstein doctrine should be upheld.

RCIA officials admit privately that the union stands a very slim chance of winning if the election is held among the estimated 1,500 eligible to vote in the three stores. If RCIA closes, the union plans to carry on the fight as long as it is legally possible. **END**

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Elongation	40-200	%	D412-51T Die C
Brittleness Temperature	-106 to -180	°F	D746-55T
Flammability	0.8-1.1	in./min.	D635-44
Hardness, Shore D	60-70	—	—
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86 psi	170	°F	
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(Above) Only one main street...a proven way to generate heavy shopping traffic. The central Mall, 920 feet long, is designed to create a park-like atmosphere.

(At right) The new Stern's department store is a thing of functional beauty. 320,000 square feet on four levels—a total of more than seven acres of space. Exterior combines use of marble, red brick, rough-cut stone and large glass areas.

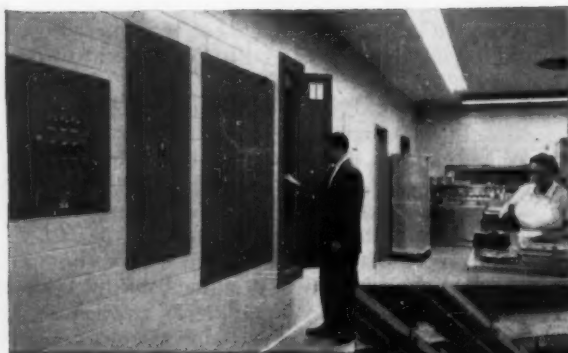


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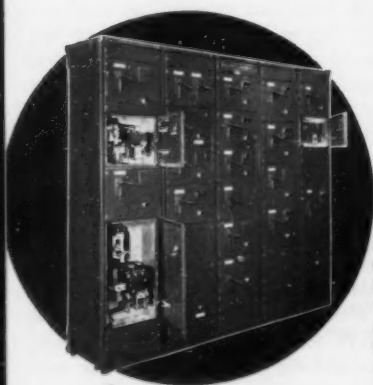


There are hundreds of **Square D Lighting and Power Panelboards** throughout Bergen Mall. These are in kitchen area, and control lighting for the Stern dining room and power for kitchen equipment.

(At right) **Square D Feed-In Duct** runs the full length of this half-mile truck concourse, distributing power to the stores on both sides.



(At left) A **Square D Control Center** of this type provides complete control for the air-conditioning system in the Stern store. In addition, there are seven **Square D Switchboard** installations with a total combined ampere capacity of 22,500 amperes.



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In Labor

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Painters, Decorators & Paperhangers Abandons Its Craft Traditions

The Painters, Decorators & Paperhangers, a craft union for seven decades, is expanding into an industrial-type union. Because "a great deal of work of members of our union has shifted from the job site to the factory," the union plans "to go where the work is."

That means organizing in factories where prefabricated homes are manufactured and where sashes and doors are made. The painting, decorating, glazing, and other work formerly done on building sites is now, more and more, a plant operation. This has cut sharply into on-site jobs for the craftsmen. To offset the losses, according to Pres. Lawrence M. Raftery, the union plans to adapt itself to the changes in the industry.

In connection with the shift, it has hired 20 organizers headed by O. T. Satre, as director of organization, and set up its first public relations office under the direction of Ed Stone, a veteran of industrial union campaigns. In another move, the union cut its initiation fee for newly organized members from the craft-level \$100 to \$10—despite some protests from old-time skilled tradesmen.

The action of the Painters, Decorators & Paperhangers in veering away from traditional crafts policies, to organize along industrial lines, is particularly interesting in the light of changes going on in industrial unions.

In the United Auto Workers, the United Steelworkers and other industrial unions, the dissatisfactions of skilled workers is leading to the emergence of craft unionism within the framework of industrial organizations, through skilled trades departments.

• • •

Lathers' Union in Chicago Signs "Hold-the-Line" Contract

A Chicago building trades union last week passed up demands for a pay raise in 1958, despite a developing pattern of 20¢ wage hikes for construction workers.

Irvin D. Friedman, president of Local 74 of the Wood, Wire & Metal Lathers, announced that the local's 1,200 members voted for a new two-year contract at present rates (\$3.70½ an hour for journeymen) because they feel wages are high enough now and continuous employment should be their major concern.

The Employing Plasterers Assn. of Chicago, composed of 46 contractors, said the union's action recognizes "it is time to stop the constant rise in wages." In addition to direct wages, the contractors pay 10¢ an hour worked into the union pension fund, 7½¢ for health and welfare benefits, and 5¢ for Lathing Foundation promotional work—or 22½¢ an hour in extras.

The Lathers' "hold-the-line" contract includes a clause

agreeing that unionists won't limit the amount of work that may be done in a day, or restrict the introduction of new tools, materials, and methods.

• • •

UAW Officials Plan to Appeal \$400,000 Judgment Won by Renda

Officials of the United Auto Workers are preparing to appeal a \$400,000 judgment returned against them last week by a Wayne County Circuit Court jury in favor of Carl Renda, one of four persons arrested Jan. 6, 1954, in the shooting of UAW Pres. Walter P. Reuther.

Renda, a former Detroit scrap dealer, sued the union and five of its officials for \$4.5-million, charging malicious prosecution. The decision, after five months of testimony, left UAW officials obviously shaken. They "expected only a token judgment, if any at all," according to Jack Conway, administrative assistant to Reuther and one of the defendants.

Charges had been brought against Renda on the strength of a statement made by Donald Ritchie, of Windsor, Ont., implicating him in the shooting of Reuther in April, 1948. Six weeks after Renda's arrest, Ritchie fled to Canada, repudiated his statement, and left the prosecution's case high and dry.

Ritchie was paid \$5,000 "reward money" from a \$25,000 fund deposited in a Windsor bank by UAW and earmarked for Ritchie, according to a deposition given by UAW's chief investigator, Ralph Winstead. Winstead disappeared in December, just before he was to take the stand as a major witness. Later, his body was recovered from Lake St. Clair. His death was ruled accidental.

• • •

IBEW Ends TV Strike Against CBS; Technicians Get Assignment Guarantee

CBS technicians were back "on camera" as a 12-day strike (BW—Apr. 12 '58, p132) ended this week when the International Brotherhood of Electrical Workers agreed to a three-year contract under which union members are assigned to handle the revolutionary "video tape."

The IBEW-Columbia Broadcasting System pact also provides a 6% wage increase retroactive to Feb. 1, bringing top technician scale up to \$185.50, with another 2.4% due in August, 1959.

"Video tape"—a magnetic reel on which both picture and sound are recorded with remarkable fidelity—fore-shadows eventual displacement of kinescopes, the current sound-on-film TV reproduction system, and of some of the 1,314 IBEW technicians who now handle "kines" among other electronic duties. When the network balked initially at guaranteeing similar assignments for video tapes, that issue overshadowed all others.

The new contract provides for severance pay for temporary economic layoff (up to eight weeks' pay for those with five years service) and for layoff or dismissal due to automated processes (13 weeks' pay for anyone, no matter how short a term of service).

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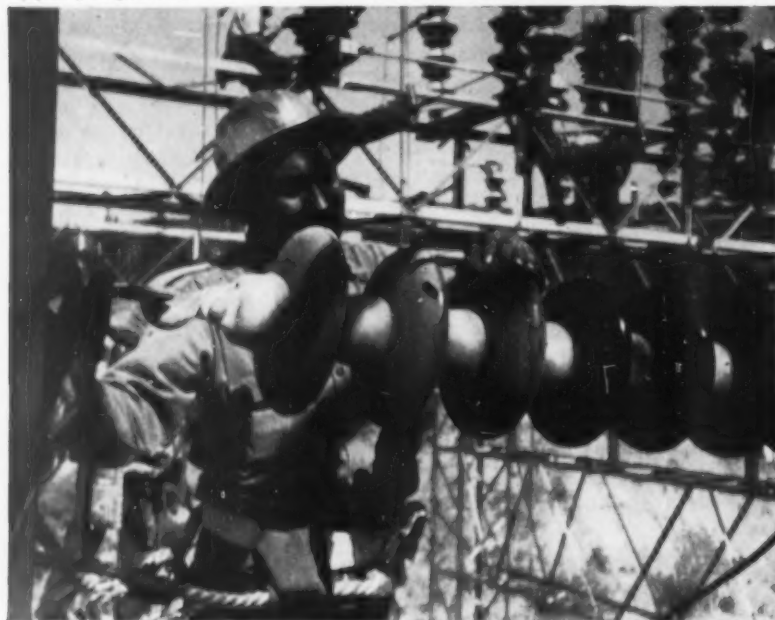
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SILICONE NEWS

Cost-cutting Silicones

Speed Maintenance, Production

TRIMMING THE TAB ON PLANT EXPENSE — Every executive knows that rising costs coupled with excessive down-time can swing a healthy net profit to an embarrassing loss. New ways to smooth production flow and cut maintenance hours have been discovered, however . . . with silicones. Here are some salient facts on how Dow Corning Silicones have come to the aid of plant engineers.

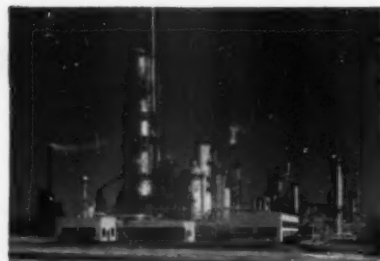


HIGH VOLTAGE IDEA — The Kaiser Aluminum and Chemical Corp. had a problem with high voltage insulators in the switchyard of their Permanente, California, plant. Cement dust would coat the strings of insulators causing current leakage and flashovers during damp weather. Cleaning insulators took eight man hours per string every six months. Of course, the plant had to shut down while power was off.

Then plant maintenance engineers brought silicones into the picture. Insulators were coated with Dow Corning 5 Compound, a greaselike dielectric material. After six months, the silicone-coated insulators came clean with a quick swish of a dry cloth. Results from additional tests were equally favorable. Now Kaiser Aluminum plans to cut cleaning schedules to once a year, do the entire job with fewer people and in less than a shift!

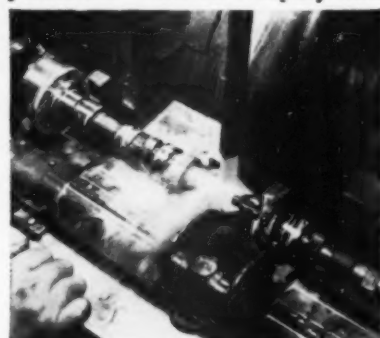
PAINT THAT STAYS NEW — To prevent rust and add attractiveness, Cosden Petroleum Refinery, of Big Spring, Texas, has painted its huge "cat" cracker and all other high-temperature units in a gleaming silver and gold color scheme. How can the paint stay on these hot surfaces?

Cosden's secret is a silicone aluminum paint made by Cactus Paint Company from Dow Corning silicone resins. It withstands temperatures from 300 to 900°F on stacks, furnaces, crackers, and similar equipment. Where several



repaintings a season were formerly needed with conventional paint, the silicone finish resists both heat and weathering . . . is still "like new" after three years. A lot of paint and painting time has been saved, rust has been prevented and the plant "looks good . . . like a refinery should."

BUBBLES BROKEN FOREVER — Foam is one waste you don't have to live with. For example, a metalworking plant had trouble with coolant on a camshaft grinder. The cutting oil foamed so badly it overflowed both the grinding machine tank and the 289-gallon filter tank connected to it. Naturally, this interfered with production. Then the company tried



a ready-to-use Dow Corning silicone defoamer. A single teaspoonful eliminated foam entirely. Now floors stay clean, work is less messy and production runs smoothly . . . due to an occasional spoonful of silicones!

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In Marketing

• • •

Drug Maker Gives a Booster Shot To Pep Up Sluggish Customers

Bristol-Myers Co., big drug manufacturer, last week announced a program to prod Americans into buying. William M. Bristol III, president, Bristol-Myers Products Div., offered a plan to extend credit to its customers, starting immediately.

On all orders to the Bristol-Myers Products Div., placed for delivery between April 16 and June 30, 1958, terms will be as follows: $\frac{1}{2}$ of the total amount of the invoice payable at a 2% discount in 30 days; $\frac{1}{2}$ payable within 60 days also at 2% discount, and the balance within 90 days at the same discount. Normal terms for the drug industry allow a 2% discount if payment is made from between 10 and 40 days.

The problem, explains E. Lloyd Bernegger, executive vice-president of the Bristol-Myers Products Division, has been that its customers have been holding the inventory line, ordering in small amounts. The question of who'll carry the inventory is cropping up in the drugs and toiletries world as in many other industries. This caution in buying has been especially noticeable in recent months.

Thus, when Bristol-Myers puts on a big promotion—and its promotion budget for 1958 is “by far the largest in its history”—retailers don't always have the stock to back the promotion up.

Bristol-Myers Co. had a record year in 1957, with sales topping \$106-million. Sales so far this year are ahead of the same 1957 period, the company reports.

• • •

Auto Parts Maker to Appeal FTC Charge Of Discriminating Against Small Orders

Thompson Products, Inc., is planning to appeal a Federal Trade Commission ruling that it discriminated against small customers by giving quantity discounts to a few big ones. The basic disagreement is over an accounting procedure that makes the price higher on small orders.

The FTC examiner says that favored customers—specifically Chrysler, Ford, and General Motors—paid from 43% to 45% less for certain replacement parts for resale to car dealers than Thompson's own distributors paid.

Thompson argues that when it receives a large order for such parts, it can schedule an efficient production run, and can ship without warehousing. Parts for small orders are run on a schedule, warehoused, and shipped as orders come in. Thus warehousing costs are charged against the small orders and not the large ones. This is common practice in the industry, Thompson says.

Meanwhile, an FTC charge that Dresser Industries, Inc., and its subsidiary, Magnet Cove Barium Corp.,

MORE NEWS ABOUT MARKETING ON:

- P. 58 Auto leasing moves into new era.
- P. 66 Point-of-purchase people bank on hard sell to boost their business.

• • •

Dallas Loved “French Fortnight,” So Store Will Try Again With British Accent

Neiman-Marcus' big splurge on its “French Fortnight” last fall (BW—Oct.26'57,p46) went over so well that the swank Dallas specialty store is planning another. This time it will stage a British Fortnight, starting Oct. 19.

The French show gave feminine fashions the big play. The men will have their innings this time. Stanley Marcus plans to show everything from British cars to British fishing tackle. One feature will be a history of men's fashions put on by London's Victoria & Albert Museum.

Marcus has had to abandon a few ideas. His plan to import some of Madame Tussaud's waxworks went by the boards in view of Texas' warm climate. Warm beer is another British specialty the store will forgo. But it is trying to persuade the Old Vic to come over. And it will surely serve five o'clock tea.

Besides the promotional value of such a shindig, Marcus feels Neiman-Marcus' example will spur other British promotions, improve trade relations with that country. Neiman-Marcus has already taken a first step. Last week it set out to sell Texans the traditional British bowler hat.

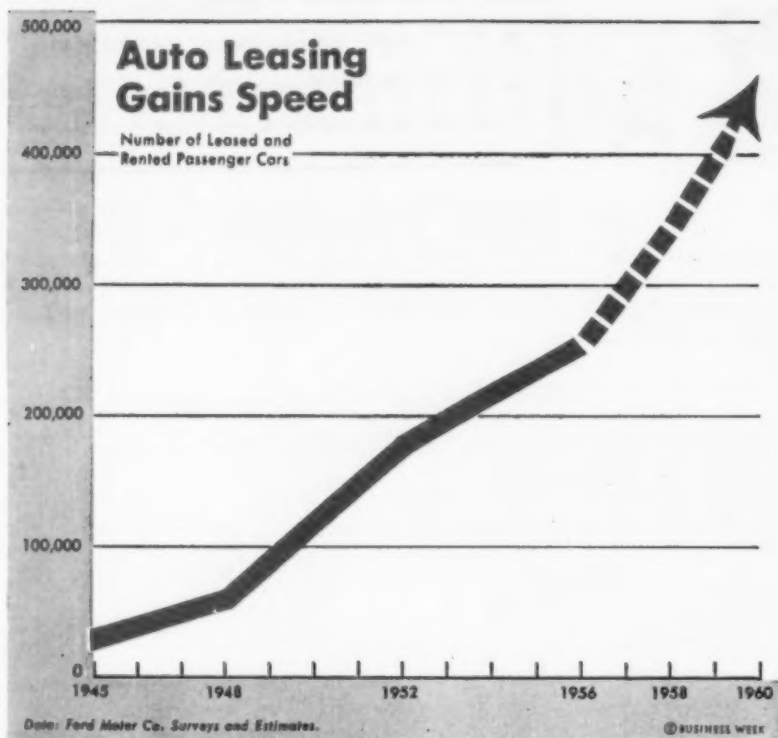
• • •

Two TV Nets Reshuffle Discount Rates In Bid for Shrinking Ad Budgets

Two TV networks, National Broadcasting Co. and American Broadcasting Co., this week announced changes in discounts for advertisers. The aim: to make TV more appealing as advertisers take a close look at TV costs (BW—Apr.19'58,p53).

NBC reduced the minimum time purchase necessary to qualify for the maximum discount, and increased other discounts. On the other hand, ABC lowered many of its discounts, but points out that they still are greater than those of NBC and Columbia Broadcasting System. Significantly, ABC added a rate for one-minute participation buys to its list. Many advertisers, especially small companies, want these smaller units of time.

NBC says that it wanted to make its rates more competitive with CBS, which, it says, had a 9% advantage in some time periods. CBS is not contemplating any changes.



The Dealers Join In

Auto dealers—and Detroit—are beginning to vie in the busy auto rental and leasing business in this year of slow sales.

Renting and leasing of automobiles is a business that dates back to the early days of Detroit, but this spring it began to take on new significance. For the first time, many auto dealers are venturing into the leasing business—as another way to dispose of their product.

There are two chief reasons for this trend. One is the toughest auto selling year most dealers can recall. The other is obvious from the chart above—the rapid growth of rental and leasing. In the last eight years, the number of passenger cars leased or rented annually has more than quadrupled, from 80,000 units to around 350,000 units.

Most of the growth comes from increasing use of rental or lease systems for fleets of company cars. But some in the industry see leasing's biggest future market among individuals—and insist that only local auto dealers can handle this end of the business.

• **Changing Complexion**—The movement of dealers into this business portends a major switch, because traditionally it has been operated as a specialty

by outsiders, independent of the dealers. Except for General Motors, which owned the Hertz system until 1953, the auto makers, too, have pretty much stood aside.

Now at least three national leasing concerns are signing up dealers as franchised licensees for their rental and leasing operations. Also, many dealers are going into leasing on their own. And there's talk in Detroit that the manufacturers may even organize their own franchised dealer into leasing chains—just to keep the "outsiders" out.

As a Ford Motor Co. spokesman said: "What is more logical than dealers in the leasing business—it's the same product and the same customers they've had for 40 years. Why have a separate industry?"

I. The Risks of Renting

Renting and leasing cars are two different businesses; of the two, leasing is by far the bigger. Of the 350,000 rented and leased cars that will be on the road by yearend, only 10% will be under short-term rental through the drive-it-yourself plans for individuals. The rest will be on long-term lease contracts running anywhere from 12 to 36 months.

However, renting is the older system. Hertz Corp., leader in the field,

traces itself back to 1918. Though it's a good business with high margins, the risks are also high. Most national chains must replace their fleets each year at new model time, since their customers—businessmen on expense accounts and well-heeled tourists—want the newest and best. Fees are pretty high—\$6 a day plus 8¢ a mile is about minimum for a Ford, Chevrolet, or Plymouth.

If the rental company overestimates demand, it can lose a lot of money fast, since the fleet must be kept rolling to pay off the investment. This winter, rental companies in Florida (which hold about a third of U.S. rental cars) had an estimated 5,000 autos idle during the usually plush months of January and February. But if the company underestimates the demand, it loses income and angers the customers it turns away.

• **New Arrival**—As a result, few dealers have tried rentals. The first major departure is a new national chain, Cars Rental System, established in Ft. Lauderdale, Fla., by James S. Hunt, an ex-Detroit auto dealer. Hunt says he has signed up 250 franchised new car dealers as licensees for his system, under which the dealers pay him a fee and also buy forms, display material, and insurance from him. They can make use of a Cars credit card system in addition. To join the setup might take a \$3,000 investment.

Much of the postwar burgeoning in drive-it-yourself rentals can be traced to the growth in airline travel, with package tours including rental of a new car. In 1948, Hertz owned only 1,212 cars; today the figure is over 20,000. The Avis System wasn't founded until 1948, a year after National Car Rental System in St. Louis got its start. The biggest newcomer is Greyhound, which entered the business in 1956. At first, it concentrated on leases, but more recently it has swung over to individual rental stations in conjunction with bus terminals.

II. The Virtues of Leasing

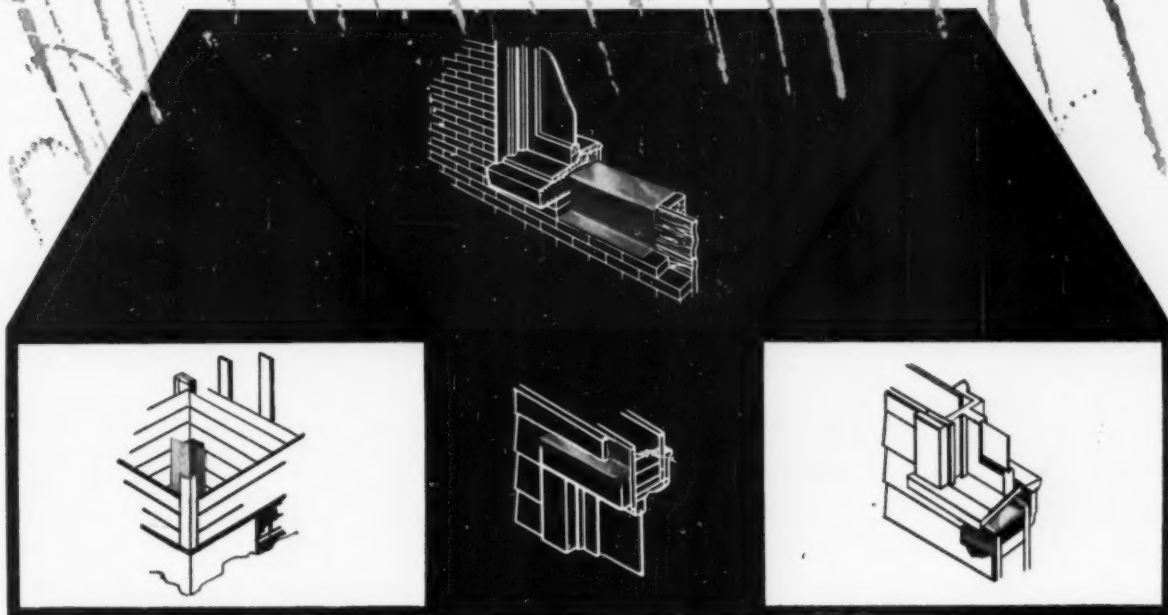
It's the leasing business, though, to which auto dealers seem to be flocking. Companies big and small—and eventually individuals—make up a market potential that has caught Detroit's eye.

Essentially, there are two kinds of lease plans, with wide variations:

The **trust plan**, under which a leasing company buys, finances, holds title, and then resells fleets of cars. It buys new cars from dealers at, say, \$75 over the factory invoice. You pay a monthly fee, based on the cost of the car, to cover depreciation, overhead, and a small profit for the lessor. The lessor sets aside a depreciation reserve, and if that doesn't equal the used car sales price when you turn the car back, you

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NOW THEY'RE EVEN WATERPROOFING HOUSES WITH ALCOA ALUMINUM FOIL



New on the market—"Aluminum-Champ" concealed flashing, made with Alcoa® Aluminum Foil, costs less than conventional materials . . . yet gives new-home builders the flexible, high-strength, rot- and vermin-proof characteristics of metal flashing.

Here's an area where good builders pin high emphasis on quality. You can't see it, of course, but concealed flashing will keep a house moisture-proof for life—at roof and side-wall junctures, corners, ridges, windows and doors.

Now FHA-accepted, "Aluminum-Champ" is quality metal flashing without the high price tag. Alcoa Foil, reinforced with inorganic glass fiber yarns, is laminated with asphalt to heavyweight creped paper and protected by a special surface coating developed by Alcoa research.

Important applications abound . . . under shower stalls for an end to future trouble . . . in foundation walls for damp-proof basements . . . for spandrel beam protection, in parapet walls, under coping, in cavity walls, and wherever beams bear on outer masonry walls.

ALCOA does not make this concealed flashing, but we will be happy to put you in touch with the manufacturer who does. And we'd like to tell you more about Alcoa Aluminum Foil, the versatile material that forms, colors, twists, combines with other materials, weaves into cloth . . . plays an essential role today in hundreds of industrial applications. Do you have a design or manufacturing problem? Maybe Alcoa Foil is the answer.

For more information, write to ALUMINUM COMPANY OF AMERICA, INDUSTRIAL FOIL DIVISION, 1655-D Alcoa Building, Pittsburgh 19, Pa.

Look for this label . . . it's your guide
to the best in aluminum value



"ALCOA THEATRE"
Exciting Adventure
Alternate Monday Evenings



The Word Is Spreading Through Industry...

John Deere Industrial Tractors and Equipment are RIGHT for Many Jobs

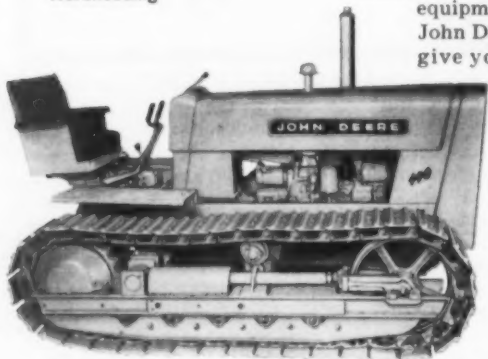
Power steering on wheel models and new clutch-type direction reverser on both wheel and crawler models are optional features that add still further to the versatility and maneuverability of the "440's."



Engineered for Industry

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- Home Building, Landscaping
- Road and Streets
- Pit, Quarry, and Mine
- Oil and Gas
- Public Works
- Public Utilities
- Plumbing and Heating
- Manufacturing and Warehousing

THE WORD IS OUT—that these new John Deere "440" Wheel Tractors and Crawlers have a big appetite for work, but operate on a slim diet of fuel ... that they can "take it" when it comes to rough going, and "dish it out" when it comes to tight schedules. Trim, eager, and easy to handle, the "440's" are nimble and versatile and light on their maintenance and servicing requirements. And there's a full line of matched equipment to suit the job. Your John Deere Industrial Dealer can give you the facts—behind-the-facts in no time at all. See him soon.



The let's-get-to-work styling of the "440" is the tip-off to its performance. Available, too, is the lighter-weight, even lower-cost "420" Series in both wheel and crawler models.



JOHN DEERE

Industrial TRACTORS and Equipment

For Further Information Write JOHN DEERE, Industrial Division • Moline, Ill.

make up the difference. If it more than matches the used car price, you get a share of the profit. You assume all responsibility for upkeep.

Full maintenance leasing, popular among smaller companies—and, more recently, among professionals such as doctors, insurance salesmen, clergymen, and business executives. The leasing company's monthly fee takes care of everything except gas, oil, washing, and storage—with no financial risk to you. If a car is a dud, it's replaced. If it breaks down, the lessor picks up the repair tab. The monthly fee varies from area to area and with the model selected, but a Cleveland outfit quotes \$110 for a two-door hardtop in the medium-priced range of the low-priced three.

• **Postwar Surge**—Leasing goes back to 1920, but it's the postwar boom that has been phenomenal. Peterson, Howell & Heather in Baltimore (with some 34,000 cars under lease) is considered by the industry as the biggest in the business, and it only started in 1946. It began as a fleet management concern, acting as transportation department for its corporate clients. Later, it expanded into leasing cars as well.

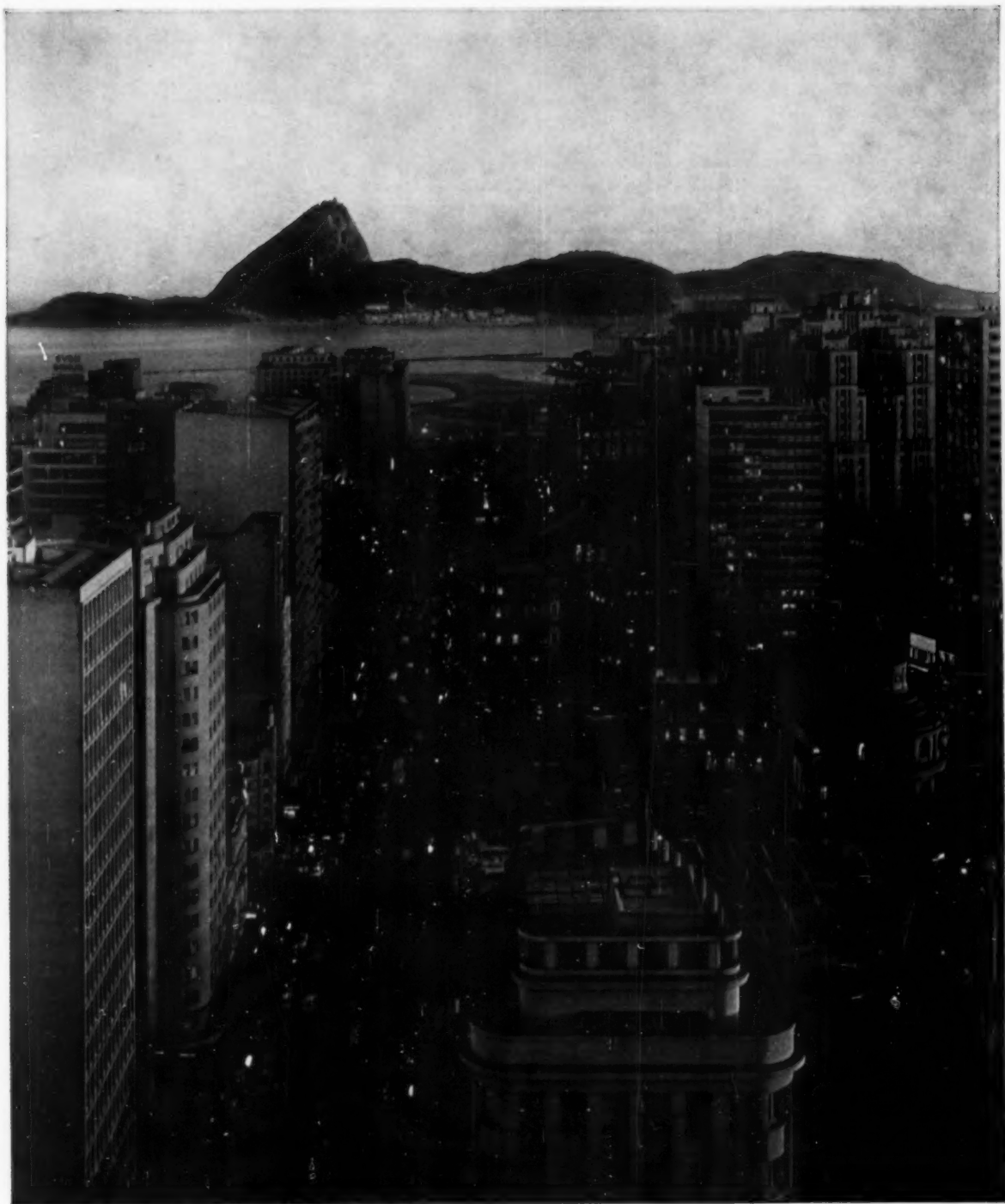
Harley W. Howell, PH&H vice-president, says company car fleets are what built his business. "Right after the war," he says, "companies virtually rented cars from their salesmen by paying mileage rates. But the salesman didn't bank a portion of the money for replacement—so soon he was driving a junker. He was unhappy, and so was the company. So we saw a switch to company-owned fleets."

Later, companies turned to leasing instead of owning the fleets. Dealers claim this trend can hurt them, because big national companies can buy and sell their cars anywhere. This may take regional business away from local dealers. However, in Howell's view, leasing aids the dealers since "it sells more cars because they are replaced faster."

• **More Cars the Better**—So far, most national leasing companies like to stick to fleet customers. Hertz, which went into leasing only three years ago, won't lease fewer than five cars to a customer. Sam J. Lee, president of Lee Fleet Management in Cleveland, says he doesn't like to do business unless at least 50 cars are involved. Others—but not all—draw the line at 10.

"Look at it this way," says Joseph J. Stedem, executive vice-president of Hertz. "With fleet business, we have 200 cars and 10 customers. But if we make long-term leases to individuals, we have 200 cars and 200 customers—and each of them has individual problems." He adds: "Someday, we're going into leasing to individuals. To do that, we'll need a dealer-type setup."

• **Close Figuring**—A leasing company



RIO DE JANEIRO is known as the "Cidade Maravilhosa" (Marvelous City). It has enhanced its natural beauty with a distinguished Brazilian style of modern architecture that has aroused world-wide admiration. It is interesting to observe how Brazil judges the quality of a building. The proud slogan "Aqui ha Otis" (Otis is here) displayed on a building is accepted as meaning that everything else in the building is also of the highest standard. This tribute to our local company ELEVADORES OTIS S. A. and our modern plant at Santo André proclaims once again that OTIS is the world's word for elevator quality.



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MANUFACTURING AND SUPPLY UNIT OF THE BELL SYSTEM

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Celanese propionate molding material

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Forticel . . . a *Celanese* plastic

TYPICAL PHYSICAL PROPERTIES OF FORTICEL

Flow temperature: (°C.) (A.S.T.M.)	D569-48	167-178
Specific gravity	D176-42T	1.18-1.21
Tensile properties:		
Yield (p.s.i.)	D638-52T	3380-5020
Break (p.s.i.)	D638-52T	3470-5240
Elongation (%)	D638-52T	56-66
Flexural properties:		
Flexural strength (p.s.i. at break)	D790-49T	6400-8500
Flexural modulus (10 ⁶ p.s.i.)	D790-49T	0.23-0.30
Rockwell hardness: (R scale)	D785-51	62-94
Izod impact: (ft. lb./in. notch)	D256-43T	2.7-11.0
Heat distortion: (°C.)	D648-45T	59-70
Water absorption:		
% sol. lost	D570-42	0.00-0.08
% moisture gain	D570-42	1.5-1.8
% water absorption	D570-42	1.6-1.8

Celanese Corporation of America, Plastics Division

Dept. 129-D, 744 Broad Street, Newark 2, N. J.

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"... the biggest market ahead seems to be among individuals... renting cars like apartments..."

STORY starts on p. 58

operator has to be sharp with a pencil and full of facts on costs and the national auto market. For most of the profit in a leasing deal comes from the resale. Michael Braude, president of Emkay, Inc., Chicago, thinks many operators have been stung by not realizing how close it's necessary to operate to make money. He's on the phone with purchase and resale deals constantly.

According to James H. Ross, executive vice-president of Detroit's National Auto Leasing Co., too many dealers have treated leasing like merchandising. They cut prices when competition gets hot—and then fail to cover costs, let alone profits.

• **Longer Terms**—With the growth of the business, every year more and more 1-year-old cars have been "dumped" on the used car market. When this happens, the wholesale price drops—and upsets the calculated depreciation. To avoid this, leasing companies are signing longer leases—for 18 to 24 months. Hertz now charges 15% premiums on a 12-month contract.

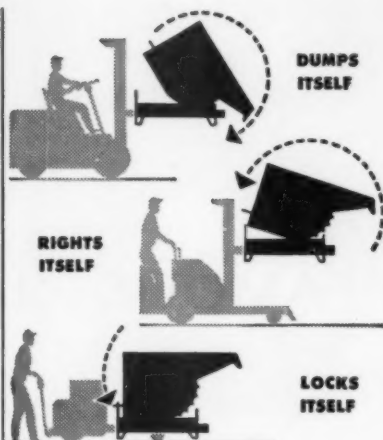
But even this can be tricky, as Charles B. O'Malley, a Chicago Oldsmobile and Rambler dealer with a separate leasing company, points out: "We got around the bigger one-year depreciation by extending the contract to 15 months. But if you keep renewing 15-month contracts, eventually you'll have two years' depreciation on a car that you've collected only 15 months' rental on. That disturbs me."

III. What's to Come

Even so, everyone in the auto business—manufacturers, dealers, rental and leasing companies alike—is agreed that leasing holds great promise. What's more, though some dissent, the biggest market ahead seems to be among individuals, who will eventually lease cars the way they now lease apartments.

• **Dealers Lined Up**—Two of the biggest companies in the business are already going after franchised auto dealers. Cleveland's Lee announced in early April a program of signing up 250 dealers as leasing licensees; its aim is to recruit individual and fleet leasing accounts through the dealers. Lee will offer both trust leases—for the bigger customers—and full maintenance deals for small or individual accounts.

Baltimore's Peterson, Howell & Heather told BUSINESS WEEK that, since



Cut scrap handling costs 50%

Use Roura Hoppers instead of barrels or boxes. It's a one-man operation. Pick up loaded Hopper with your own lift truck. Take it to freight car or scrap bin. Flip the latch and the Hopper dumps its load, rights itself, locks itself. Saves time... cuts costs 50% or more. Thousands now in use.

Ruggedly made of 3/4" steel plate with continuous arc-welded seams... in 5 sizes from 1/2 to 2 yards capacity. Also available in stainless steel or galvanized. Equipped with live skids or a choice of wheels.

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More businesses are group-insured in the AETNA LIFE than in any other company

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GROUP DIVISION
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INSURANCE COMPANY
HARTFORD, CONNECTICUT

Affiliates: Aetna Casualty and Surety Company
Standard Fire Insurance Company

"... leasing and rental can account for 500,000 units a year—10% of annual auto production..."

STORY starts on p. 58

the first of the year, it has been quietly working with 150 new car dealers on a sort of trading basis, mostly for fleet accounts. "We don't charge the dealer any franchise fee," says V-P Howell of PH&H. "If the dealer has a customer who wants to lease, he turns the account over to us, we buy the cars from the dealer, the dealer delivers them, and the customer pays us the monthly fee." So far, PH&H's leases have been of the trust type.

"Eventually," says Sam Lee, "I think leasing will become a standard document along with the cash sale and the conditional sales contract." Howell agrees: "Every dealer is going to be in the leasing business. It's an effective sales tool just like installment buying. Remember, the auto companies founded the finance companies—it's logical for them to be in this also."

• **Volume Potential**—On the manufacturing side, another prophet is James J. Larkin, of Ford Div.'s fleet sales department. And he figures that leasing and renting together can account for 500,000 units a year—10% of annual auto production.

What are some of the implications of such volume? For one thing, a dealer might become more and more of a middleman—accepting cars from the factory and turning them over to a leasing company, his own or an outsider, for a few dollars over factory invoice. On such a narrow margin, some dealers might become just big supermarkets operating off a lot. Others might find the service end of their business bigger and more profitable, because leased cars would probably be serviced more regularly.

Leasing would also provide an assured market for the auto industry. But the business might become more concentrated. For example, take an area that absorbs 4,000 new cars a year, with sales divided among 10 dealers. If leasing grows until it takes 25% or more of those cars and a leasing company buys all its cars from one dealer—as some reportedly do today—the other dealers would suffer. This is one reason why the auto makers are taking a close look at leasing and its effects on marketing patterns—and why they might step in to protect their dealer organizations.

"The leasing industry," says Ford's Larkin, "is big, it is stable, and it is here to stay... and it is a way of merchandising that has been in the auto industry for 40 years." Detroit doesn't intend to let it get away. **END**

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you know
when the fuel
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**CLEARLY
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The new Scripto VU-LIGHTER is the perfect prestige gift for your customers and prospects. Lightweight; beautifully trimmed in chrome. Your choice of colors. So inexpensive—especially in quantities of 25 or more. Unconditionally guaranteed!



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Coaxing the Customer Into a Spending Mood

The stiffening attitude of the consumer toward bulging shelves has convinced many manufacturers that the day of the hard sell is at hand, and it's time to take a close look at their advertising budgets (BW—Dec. 7 '57, p. 45). For this reason, makers of point-of-purchase advertising material—the displays that go directly into retail stores to tempt customers—feel that this may be their year.

Last week, at the 12th annual exhibit of the Point of Purchase Advertisers Institute in New York's Hotel Astor, display producers showed they had plenty of flashing lights, whirling pinwheels, bobbing signs, and other lures for the unwary shopper (pictures). But important elements in the industry are also trying to convince manufacturers that there's more to such advertising than dazzling signs. Through POPAI, the industry is:

- Selling the point-of-purchase concept as an advertising medium to be integrated with an advertiser's over-all advertising program, and promoted properly to retailers.

- Turning to marketing research and other techniques to develop a more

effective use of p-o-p displays as "merchandising tools."

- Broadening its own approach to selling display material. Producers are increasingly acting as merchandising consultants to help their manufacturer-customers develop and utilize p-o-p material.

- **Growth Years**—These changes are being brought about by the tremendous growth in the amount and variety of p-o-p displays being used. Until World War II, p-o-p displays consisted chiefly of printed matter such as banners, posters, counter cards. The aims primarily were to get attention and add a little color to the store.

In the following decade, self-service burgeoned in the supermarkets, then expanded to a lesser degree into department stores, variety stores, and other retail outlets. In addition, stores of all kinds faced a shortage of sales help. All this meant that, in addition to attracting attention, p-o-p also had to display merchandise where consumers could get to it, and provide the kind of information about price and style that shoppers used to get from clerks.

- **It's a Billion-Dollar Business**—No-



EXHIBIT of Point of Purchase Advertisers



TRANSPARENCIES of William Melish Harris Associates flash car colors, trims, fixtures.

MOBILES displayed by Industrial Lithographic Co. suggest ideas for seasonal promotions.






Institute is a dazzle of lights, pinwheels, mobiles—all designed to set the reluctant customer off on a buying spree.



TIE-INS featured by Timely Service include trademarks of Piel Bros., Tip Top bread, Bakers chocolate.



SELF-SERVICE fixture designed by W. L. Stensgaard & Associates organizes Arrow shirts by size and style.



Model 15-F
Secretarial
Chair

\$29.95
(\$31.95 in
Zone 2)


COSCO
Office Chairs

"Office fashioned"

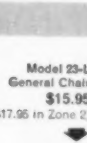
FOR APPEARANCE, COMFORT, WEAR

• Cosco "Office fashioned" Chairs are designed by seating engineers and mass-produced by skilled craftsmen . . . to look better, feel better and wear better than other chairs costing twice as much. All component parts except casters are manufactured in our own plant . . . a practice which permits greater economy and quality control. Contact your Cosco dealer, listed in yellow section of phone book, for free ten-day trial!


HAMILTON MANUFACTURING CORPORATION
COLUMBUS, INDIANA



Model 20-LA
Conference Chair
\$29.95
(\$31.95 in Zone 2)



Model 23-L
General Chair
\$15.95
(\$17.95 in Zone 2)



Model 18-TA
Executive Chair
\$49.95
(\$52.45 in Zone 2)

(Zone 2: Texas and 11 Western States.) Copyright, 958

body really knows just how much manufacturers spend on p-o-p, but POPAI estimates last year's expenditures at about \$1-billion. The food, drug, and beer industries are the biggest users.

• **No. 1 Problem**—This kind of growth however, has intensified the p-o-p in industry's biggest problem: getting the retailer to use the displays. With few exceptions, display producers sell directly to manufacturers, which then send the material to their retail outlets. In the food and drug fields especially, the retail store becomes a battleground where competing manufacturers vie for space for their displays. Estimates vary as to how much display material ends up in the trash can—but they're always high.

The industry wants to correct this. POPAI's executive director, William M. Mee, says that his organization's educational program is aimed at increasing the effectiveness of p-o-p material as much as the amount used.

• **Handicaps**—The industry is pushing its program hard. But it faces difficulties. For one thing, it is handicapped by the lack of precise research data on effectiveness, cost in relation to sales, and other marketing facts that advertisers like to know. Recently, POPAI hired a research director to work on these angles.

Another problem, especially in integrating point of purchase with other advertising efforts, is that ad agencies by and large don't get involved with display work. One reason is that they don't collect their 15% commission on this kind of work.

• **Merchandising Approach**—To help achieve retailer acceptance, many big p-o-p producers are stressing their role as consultants rather than sellers of specific products. POPAI's new president, O. H. Stark, is sales vice-president of Snyder & Black, lithographers. But his company offers all sorts of displays. "We no longer sell just printing," Stark says; "we sell merchandising ideas."

Progress toward the merchandising consultant approach is, of course, uneven. But the group that has moved farthest in this direction includes the permanent display producers, makers of fixtures, display racks, and signs intended to last for long periods. William Harris—POPAI's first vice-president—uses p-o-p to solve merchandising problems.

Take nylon hosiery, for example. Hosiery makers have tried to sell their products through supermarkets, but so far, supermarkets account for only about 12% of hosiery sales. A survey convinced Harris that cheap-looking packaging and inadequate selection kept women from buying hosiery in supermarkets. For Glen Raven Mills, Harris developed a display fixture that uses brilliant color transparencies to il-



You can show 300% improvement

If hazardous, short-lived cotton work gloves are still being worn in your plant, it will pay you to job-test Werx gloves, made by Edmont.

As a replacement for canvas, these modern, plastic-impregnated gloves can easily effect a 300% improvement in wear—with a measurable reduction in glove costs and nuisance hand injuries.

Available in slip-on and knitwrist styles, for both men and women.

Free Offer to Employers: We make more than 50 types of coated and treated fabric gloves to fit all needs. Tell us your operation. Without cost we will recommend gloves which fit the job and send you samples for testing.

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Edmont
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EQUIPMENT AND WEAPONS FOR INDUSTRY, SCIENCE AND DEFENSE

Rockwell Report



by W. F. ROCKWELL, JR.

President

Rockwell Manufacturing Company

POSSIBLY because of the publicity given our diversification program and our recent plant expansion activities, there is a misconception about the number of businesses we operate. The

fact that we have twenty-three plants in the United States does not mean that we operate twenty-three different businesses or twenty-three sales organizations or that the management and marketing talent of the company is diverted in twenty-three different directions.

Actually, what we make, where we make it, and how we market it is determined by a business philosophy which has given direction to the growth of our company from the beginning. It can be very briefly stated.

First, we do not go into businesses about which we know little or nothing; we develop or acquire only such products as fit in with our manufacturing and marketing facilities and background.

Second, we seek always to spread administrative costs over a broader and broader range so that we can afford top quality staff talent.

And third, we never stop trying to spread distribution expense over more and more product lines to lower costs of moving goods to customers.

The result is what we call "related diversification." For instance, although our twenty-three plants produce nineteen basic product lines which in turn break down into more than twenty-five thousand models, sizes, and types—yet all of these items group themselves naturally into just three kinds of products. These are *flow control equipment* such as valves and regulators; *measuring devices* such as gas and water meters, taximeters and parking meters; and *power tools* for industry and home craftsmen.

And while we market these products to twenty-eight basic growth industries—each with a number of sub-markets—we do so through only seven sales organizations carefully tailored to the needs of the markets they serve.

The fundamental aim of our kind of "related diversification" is not just to grow bigger, but constantly to grow stronger in terms that mean most to our customers, employees, and shareholders.

* * *

An eight-page illustrated bulletin fully describing the new Walker-Turner line of woodworking jointers and other "light-heavyweight" woodworking machines has been issued by our Power Tool Division. The new jointer line—including 6-inch and 8-inch machines in various models—offers increased precision and speed, combined with exclusive Walker-Turner safety features.

* * *

The belief is pretty widespread (and artfully encouraged by some) that manufacturers raise prices faster and to a greater degree than they raise wages. Yet the contrary is true. From 1914 to 1957, for instance, (a period which includes the inflationary pressures of three wars) the Consumer Price Index rose by about 180%—but during the same period, average hourly earnings in manufacturing rose by more than four times that amount, or 840%.

* * *

Our recently purchased 50,000 square foot plant at Guelph, Ontario, increases our manufacturing facilities there to 142,000 square feet. The added space will help us meet the increased demand for Rockwell gas meters and regulators due to the greater availability of natural gas in eastern and central Canada. Other products made at Guelph for the Canadian market include power tools, industrial liquid meters, parking meters, and a line of electrical conduit fittings.

One of a series of informal reports on the operations and growth of the

ROCKWELL MANUFACTURING COMPANY
PITTSBURGH 8, PA.

for its customers, suppliers, employees, stockholders and other friends



illustrate occasions on which various styles should be worn. The transparencies tell size, color, style, and price, in a dramatic way.

• **As a Consultant**—The pioneer in the over-all merchandising approach to point of purchase is William Stensgaard, of W. L. Stensgaard & Associates, Chicago. Unlike most of the industry, Stensgaard adopts the advertising agency relation with clients. If a company uses him as a full-time consultant, he doesn't work for any competitor. Among his exclusive clients are Radio Corp. of America, Sherwin-Williams Co., Hickok Belts Mfg. Co., and Cluett, Peabody & Co.

Stensgaard worked out a marketing program for Arrow shirts that let Cluett, Peabody to take the shirts out of showcases where they traditionally had been sold, package them, and put them in open display fixtures. The fixture organizes them by style, size, and sleeve length—with the three styles that account for 58% of all sales most prominently displayed. Stensgaard points out that the fixtures play down the Arrow name. But, he says, giving the retailer displays he can use for other merchandise is a trend among big companies. "What the retailer wants," he says, "is a better selling method, not just a competitive tool."

• **Permanent Displays**—Producers of permanent displays get deeper into their client's selling problems because their displays are intended to last, are more expensive, and justify the time and effort. Retailers often share the cost of the big displays. But the backbone of p-o-p is still the temporary material, which can be used for a variety of special promotions, is colorful, flexible, and less expensive.

• **Trends**—Among trends in temporary displays, producers point to:

• Use of spectacular displays, some 8 ft. high. These often are part of complete in-store promotion efforts where a manufacturer "loads" a store with point-of-purchase material.

• Increase in the use of motion and light in displays.

• Growth of corrugated paper, especially for bins in supermarkets. Anything that takes the product off the shelf and displays it more prominently is welcome—and bins do the job cheaply.

• **Adaptable**—Spot magazine, a publication devoted to point of purchase, says that one growing use for p-o-p material is for regional advertising. Stores in New York and California, for instance, often require different kinds of promotion—which point of purchase can fill. Another use is in adapting advertising to special groups. Spot shows how American Tobacco Co. uses Negro models in its p-o-p displays catering to the Negro market. **END**

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EDUCATION

Special Report *part II*

What's Being

It is six months since it suddenly became clear to millions of Americans that one of the greatest challenges facing the country today is reform of the U. S. educational system.

Last October Russia demonstrated with its Sputnik I that it is indeed a technologically advanced power and that its advances rest heavily on an educational system that puts hard and sustained demands on its students.

Since then there have been passionate, but confused, calls for the U. S. to try some single

prescription to improve its educational system. But the system's ills form a complex package, and the cure must also be a package.

Last week, in the first installment of this two-part report on education, Business Week presented some of the parts of that package of problems and answers.

This week, Business Week reports on the action being taken to make broad repairs to the educational system and on directions in which those changes may lead the U. S.



Planned for Tomorrow's Schools

Twenty or thirty years ago the U.S. schoolroom was a gray place to the eyes of its inmates. The light that came through windows set in heavy brick walls was filtered through a mist of chalk dust, and was absorbed by the wooden floor and by the blackboard.

In the last decade, the schoolroom has become pretty well unrecognizable. Architecture has helped change it, providing color and curtain walls of glass. But more than this, an elaborate complex of machinery has been moved into the classroom—movie projectors and movie screens, tape recorders and record players, color slide viewers and electronic voice circuits. The purpose of all these: to get the greatest possible mileage out of what good teachers there are. And on these and the following pages, you see the latest in classroom

equipment, closed-circuit television receivers.

• **Most Elaborate**—Of all the mechanical aids to education, TV is the one that has caused most excitement among educators. And of all the classroom TV experiments, the one pictured here is the most elaborate, and the one most closely watched by the nation's educators. It is the county-wide experiment in closed-circuit TV teaching that's being conducted in Washington County (Hagerstown), Md. The Ford Foundation has put up the money, the electronics industry contributes the TV equipment, and the Chesapeake & Potomac Telephone Co. lends the coaxial cable that connects the schools with a central TV studio.

Eighteen months ago, 5,300 Washington County students started getting

one lesson a day over the classroom TV system. Today, 23 of the county's schools are linked to the central studios; and 12,000 students, from first grade to twelfth, get an average of at least one TV lesson a day. Next fall, all 48 schools in the county, with their 18,000 pupils, will be in the system.

The Hagerstown experiment is a five-year project for the Ford Foundation's Fund for the Advancement of Education. The final cost isn't known yet, but the Foundation expects it to run something under \$1-million.

• **TV's Purpose**—Its purpose is to spread the talents of the county's best teachers over the largest possible number of classrooms. Twenty-two of the county's 300-odd teachers have been withdrawn from their classrooms, given offices in a back





TV TEACHER in the central studio gives instruction in art to fourth-graders in Hagerstown's elementary schools.



LEARNING by seeing, a third-grader on classroom teacher's orders, points out component parts of word flashed on TV set.



PAUSE for the class comes when TV system goes out of whack temporarily.

IN CHARGE again, teacher leads her students through "follow-up" after a TV session in reading.



Hagerstown Wants to Find Out:

room of the Board of Education's headquarters, and set to work preparing their courses, then delivering them by television.

In the TV schools, the students sit as many as 280 to a class, while the teacher lectures from the central studio. Meanwhile, the classroom teachers monitor the large classes. The TV lecture may last from 20 to 40 minutes. Then the class breaks up into smaller, more manageable groups, and the classroom teachers take over. Their job is to follow up the TV lecture, to test the students' comprehension of what went before, to discover those who failed to grasp the content of the lecture, and to attempt to make things clear to these.

In Hagerstown, researchers are this year comparing the performance of matched pairs of students picked from among those getting lessons by TV and those in schools not yet wired in to the TV system. Results of this research won't be known until well into the next school year. And over the next three and a half years further evaluations of the system will be made. But some preliminary findings based on less intensive research are already in. Among them: Children in schools wired for TV are advancing 25% faster in arithmetic than children in the same grades two years ago.

• **Higher Quality**—In all subjects the material being presented to the children via the TV screen is of a higher quality than that they would get, on the average, from classroom teachers only, says William Brish, the county superintendent.

ent of schools. This, he agrees, is only as it should be, since each TV teacher delivers only one lesson a day, spends six or eight hours working up each half-hour presentation, and is relieved of all the chores of the classroom—keeping order, maintaining attendance records, correcting papers every other day, and so on. Those jobs remain the work of the classroom teacher—along with the important task of following up the TV lesson.

It is the belief of Brish and his associates that the TV teacher must never replace—may only supplement—the classroom teacher; that the TV teacher is there to put over as clearly and graphically as possible the concept behind the subject matter that he teaches; and that the classroom teacher must follow up this with tests, with whatever further explanation seems necessary, and with presentation of the practical applications of what has been taught.

Naturally there is no precise formula for selecting the TV teachers. The 22 who have been chosen up to now, says Brish, have been selected on the basis of their interest in the TV experiment, their ability to present the core of their special subjects, the length and quality of their earlier work in the classrooms. They are supposed to be "master" teachers, a cut or two above the average. Their "dedication" to the job is supposed to be above average. Their experience in the classrooms is supposed to be sufficiently long to save them from becoming isolated now they no longer attend classrooms.

The visitor who spends a few days

How Much Can You Learn by TV?

Education Report starts on p. 74





Jet Jitneys

by R. G. LeTOURNEAU

The Electric Wheel we've been talking about from time to time has many uses. Whether in construction work, logging, land clearing or off-road transportation, every mobile machine on the job can have exactly the same propelling power.

The Electric Wheel machine we want you to know about today will do a different job—a job which is important and one which will affect you as you fly in the days to come.

A propeller-driven plane these days taxis out to the end of the runway and takes off. But with the jet plane this is too noisy and not economical enough, so they want a tractor to pull it out to the end of the runway.

Now, the traction required to move one of the big 250-ton jets is not out of the ordinary... but it must begin very slowly or else you'll jerk the wheels out from under. For it isn't practical to put enough metal in the jet's running gear—to make it strong enough—so that an ordinary tractor can "put 'er in low" and let out the clutch.

But what about the torque converter or hydraulic clutch, isn't that smooth enough? Well, our Electric Wheel is as much smoother than the torque converter as the torque converter is smoother than the ordinary friction clutch. And with the Electric Wheel you don't lose half or three-quarters of the power while you are getting started.

The fact is, we're sure our Air Tow Tractor is the answer to jet airplane towing. It offers you infinite ratios and continuous

pull—from a speed so slow you would have to look twice to see if it was moving to full speed ahead, and *no shifting*.

With our Electric Wheel, as you design for a low silhouette, you are not hampered by shafts and gears or transmissions and clutches between the engine and the wheels. An electric wire does it all. All you have to do is decide how high from the man's feet to his head, and how high you want his feet off the ground, and that will be the height of the cab. That way, you'll have no trouble at all driving under the wings.

Then, for traction on hard-packed glare ice, we've got a fifth wheel right in the middle of the machine. This wheel has sharp spikes sticking out. All you do is press a button and electric-powered arms bring the wheel down to grip the ice. As the pressure comes on, the wheel will start turning at the same number of feet per minute that you want on your regular wheels—and out you go never mind how slick the ice!

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sitting in the back of Hagerstown's TV classrooms inevitably has his doubts about the system.

The Major Doubts

What happens to morale now the school system has its "master teachers and its classroom teachers? The 22 TV teachers and the 290 classroom teachers within the system seem to work amicably as a team. But won't morale suffer if the "master" teachers seek a pay differential? School Superintendent Brish says the question hasn't arisen. The TV teachers confirm this—but they add the word "yet."

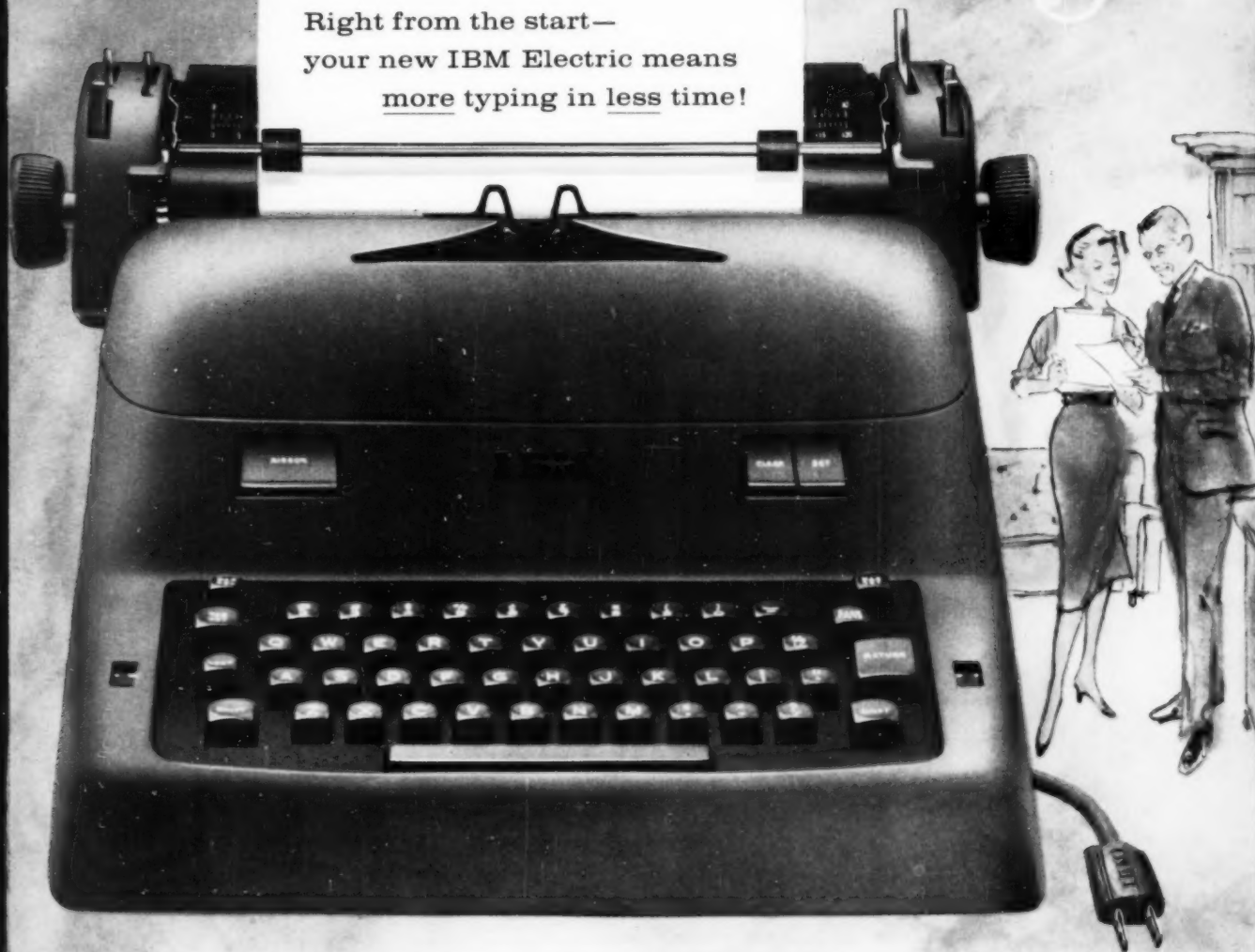
Since the TV teachers are regarded as among the county school system's best, who is really supplementing whom? The visitor does hear follow-ups in some classrooms that indicate that in these at least the classroom teacher is the supplementor. The schools' TV coordinator, T. Wilson Cahall, agrees that this could be. "Not all our classroom teachers have yet got the concept of the 'follow-up,'" he says. "We know this, and we know we must do more work in this area. But so far in this experiment we have been more concerned with the material that goes over the coaxial cables. The experiment has another three and a half years to go, and we will soon give more attention to that problem."

And what of one possible effect of TV lessons delivered by one teacher to 1,000 or more pupils: Will this approach crush individuality among the students as well as among the classroom teachers? Say Brish and his associates, "No, not necessarily. What happens in the classroom after the TV lesson is finished is just as much a matter of individuality among the classroom teachers as it ever was." Again, no real conclusion is possible. But again the visitor does find a group of 10-year-olds in an elementary arithmetic class working long division by direction of the TV teacher—a phase of arithmetic they find easy, because they covered it a year ago in a non-TV school. The classroom teacher explains that they could be doing more advanced work, but that while the TV experiment lasts she is not permitted to switch off the set at her own discretion.

• **Science by TV**—There are far fewer questions about the Hagerstown schools' TV science lessons, which frequently involve use of equipment that the county simply couldn't afford to buy for every school, or of laboratory demonstrations involving the use of dangerous materials that couldn't be brought into a classroom, or of experiments that take several hours to prepare and wouldn't be feasible unless they could be shown to

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1,000 or more students at one time.

Brish and Cahall recognize that laymen and educators have these questions about the TV experiment. They agree the questions are valid. But they point out that most of them, in the end, come down not to questions about the use of TV, but to questions about the processes of education.

Others' Questions

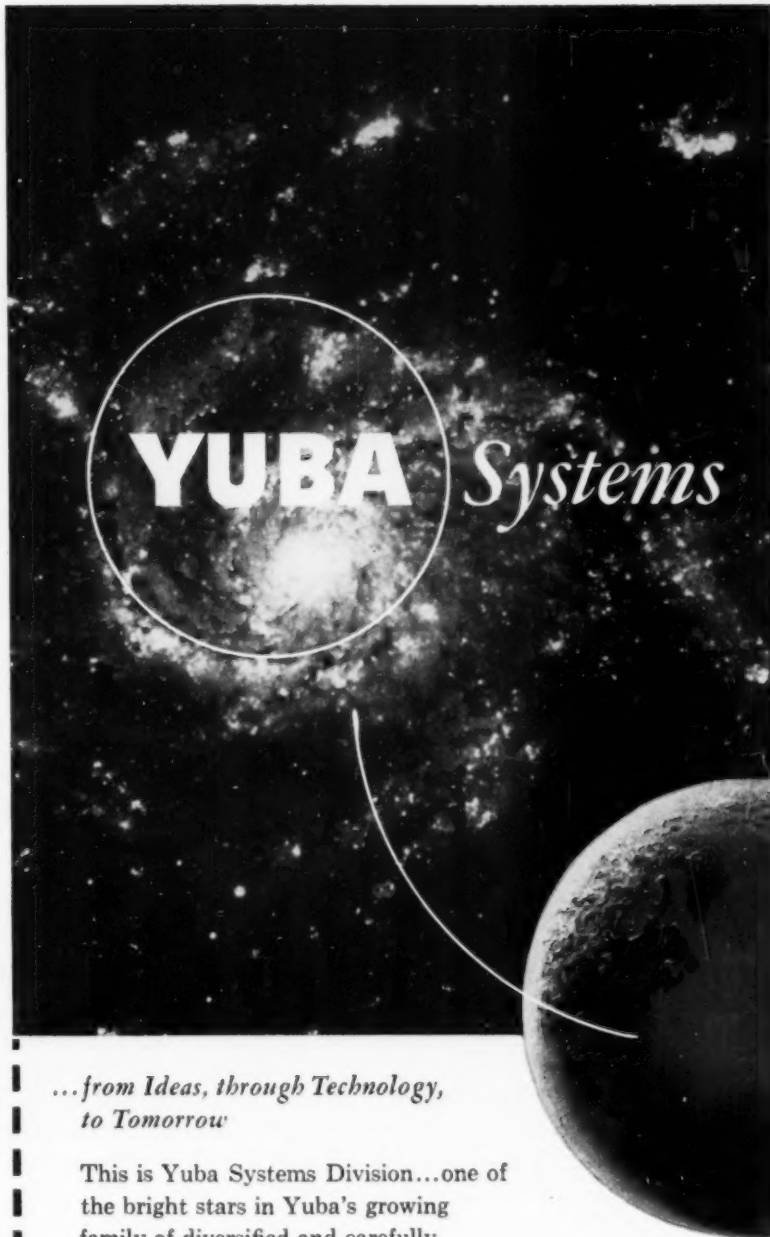
The same questions are being asked elsewhere. They are being raised, for example, in an estimated 250 schools that use movies to teach physics to perhaps as many as 5,000 students. These schools are using a set of films made by Dr. Harvey White, a noted physics teacher in the University of California at Berkeley. White's series of 162 lectures and demonstrations originally were part of an experiment in educational TV. (Indeed, his films are used in Hagerstown in the eleventh grade physics course.) But as soon as movies were made of his lectures the schools started snatching them. Traditionalists in educational method wince at the idea but admit, "If you have the kind of school where you use the football coach to teach a physics course, the kids probably get more out of the films."

Questions are being asked also about experiments in schools that involve no mechanical aids to education. One of the most interesting of these experiments is the so-called Bay City-Central Michigan Plan. Its aim is to break down the teaching function into its component parts and assign the parts that take no academic skill to teachers' aides.

Sponsors call this the task force approach, and they point out that while somebody undoubtedly has to help a first-grader get his rubbers on, there is no reason why it has to be a licensed teacher who is needed elsewhere.

In a number of other cities besides Hagerstown, the Ford Foundation is underwriting pilot projects with classroom TV. None of these is so elaborate as the Hagerstown experiment, but most of them have prompted the airing of basic questions about education in those communities.

So far as the Hagerstown experiment goes, the Ford Foundation already is permitting itself about as much enthusiasm over the results as the code of academic manners will allow. Not long before his death in an airplane accident this month, John K. Weiss, treasurer of the Fund for the Advancement of Education, wrote in *The School Review*, "... These Marylanders are leading the nation in one of the most remarkable educational ventures of this dec-



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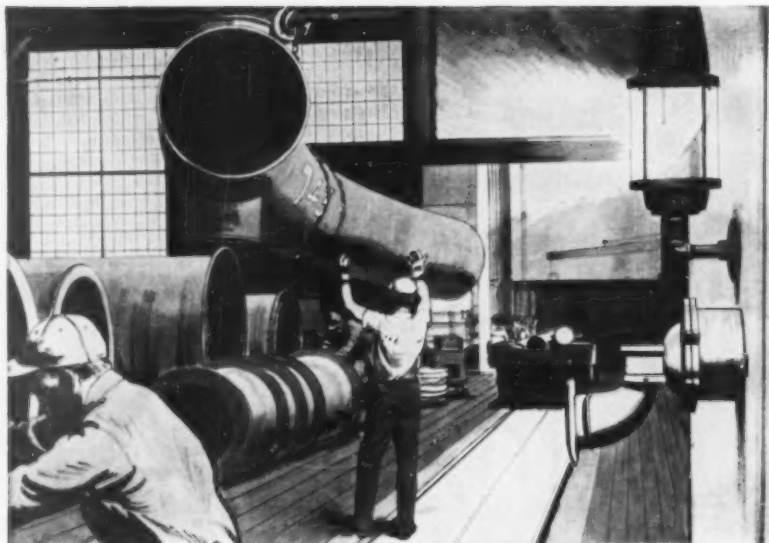
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Schools of the Future

Many other educators share this same enthusiasm, for they believe classroom TV will bring vast changes to education.

They argue that education today is the most backward of all the professions. It has failed to exploit two great concepts that have revolutionized almost every other aspect of life—the concepts of specialization and of technological progress. As a result, the modern school—even the big modern school—is not a unified organism; it is an "eggcrate" consisting of 20 or 30 or 50 classrooms in each of which a single teacher tries to do just what the teacher across the hall is trying to do—and tries to do it simply by talking and writing on the blackboard.

• **Field for Specialists**—The school of the future, as these educators see it, will be built around the teaching team. The team will consist of subject matter specialists who are experts in presentation, psychologists to watch over character development, guidance experts to plan programs, teachers' aides to monitor the classrooms and keep the records.

In medicine, so the argument goes, the old general practitioner has yielded to the medical team, a group of different people with different skills—surgeon, internist, anesthetist, nurse, and nurse's aide. The same must come in teaching. It's as silly to have an ace arithmetic teacher breaking up fights in the back of the classroom as it would be to have a neurosurgeon hustling bedpans.

Television is essential to the team approach; without it, such intense specialization would be prohibitively expensive. Only when your whizbang science lecturer can reach 1,000 or more students at a time can you afford to let him give only one lecture a day; only then can you afford to pay all the rest of the team to do the things that he doesn't do.

Thus, when you try to evaluate the results of the experiments with classroom TV, you have to remember that the people who are running them want very badly to have them succeed. For success undoubtedly would simplify the whole educational problem in somewhat the same way that the invention of printing simplified it 500 years ago. Printing revolutionized education by making the wisdom of the great teachers available to those who could not actually sit and listen to them. Television could revolutionize education by



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making it possible for everyone actually to sit and listen.

• **Uninspired Audience**—But there is a reverse twist on the analogy that bothers the more conservative educators. Printing, they say, made it possible to learn without sitting and listening. Will television make it possible to sit and listen without learning? In other words, will watching a carefully prearranged lecture or demonstration on TV drive the lesson home in the same way that actual collision of minds in the classroom does?

There's no talking back to a TV screen (though some of the observers of the Hagerstown experiment have been touched to see small children putting up their hands to answer a rhetorical question from the studio teacher). Will the student who goes through school getting all his wisdom out of a black box wind up with the idea that this is the way it is, boys, all neat and tidy with no loose ends? Will he ever get the quality of tough-mindedness and the itching intellectual dissatisfaction of the true scholar?

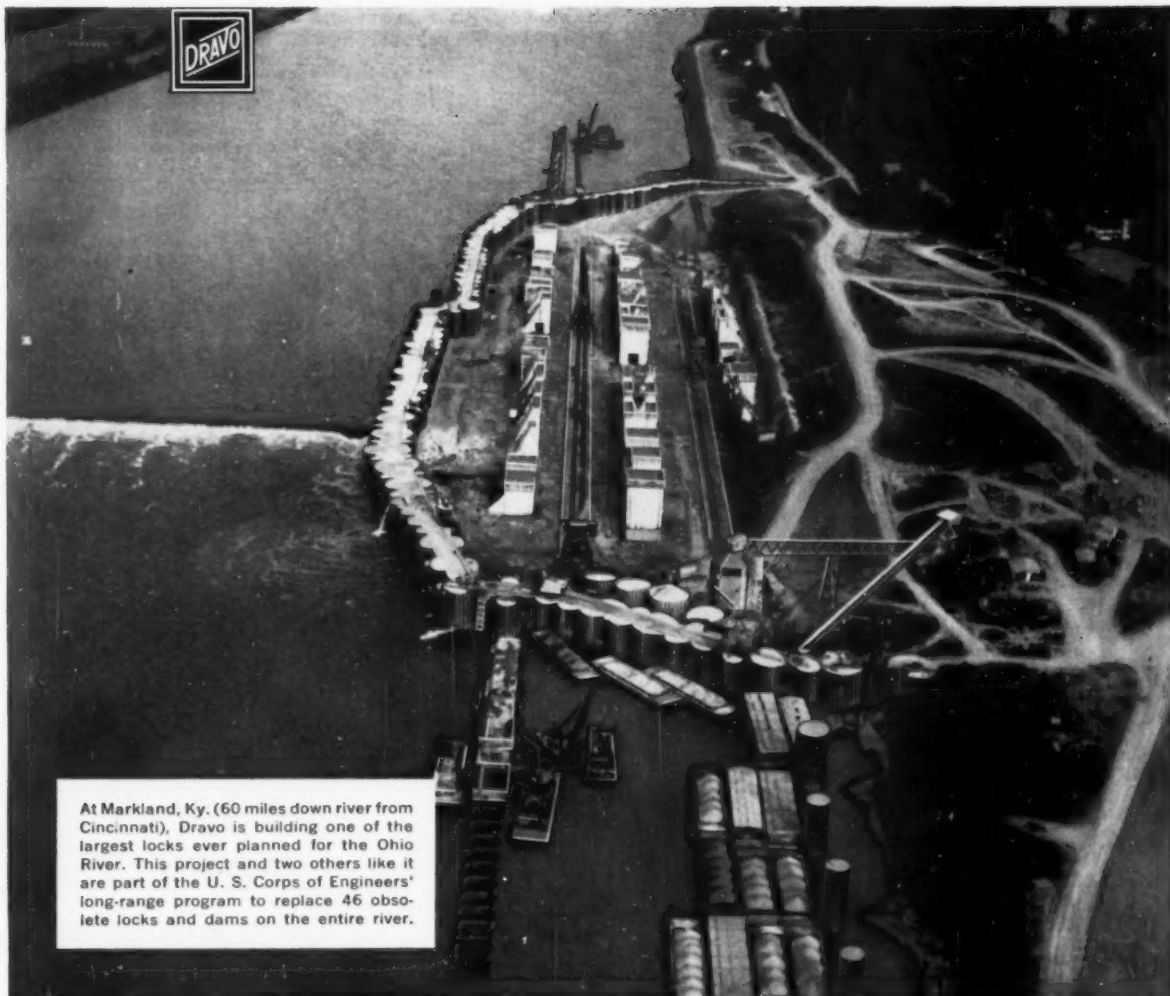
The boosters of educational TV hasten to promise that he will. The lectures will be carefully designed to stimulate reading and discussion. Seminars and classroom discussion after the formal program will fill in the gaps.

What is a Teacher?

But, ask the conservatives, is this teaching? Well, by one widely accepted definition, it is. Teaching, this definition goes, is a dual process made up of instruction plus assistance, and both parts of the process are of equal importance. Instruction is simply the imparting of knowledge; it represents a challenge to the student. But without assistance from the teacher, the student may not be able to cope with the challenge.

As almost anyone can remember from his own school days, there are teachers who can present their subjects brilliantly and dramatically but nevertheless leave most of their students baffled and confused. The reason seems to be that these brilliant men are so wrapped up with their subject that they are unable (sometimes unwilling) to respond with assistance when a student fails to understand what they're talking about. The more instruction they give, the more unscalable becomes the blockage in the student's mind. It's often the less spectacular teacher, not the academic genius, who is most likely to spot a student in difficulty, to be ready to help the student search for the source of his difficulty.

Thus, the boosters of educational TV



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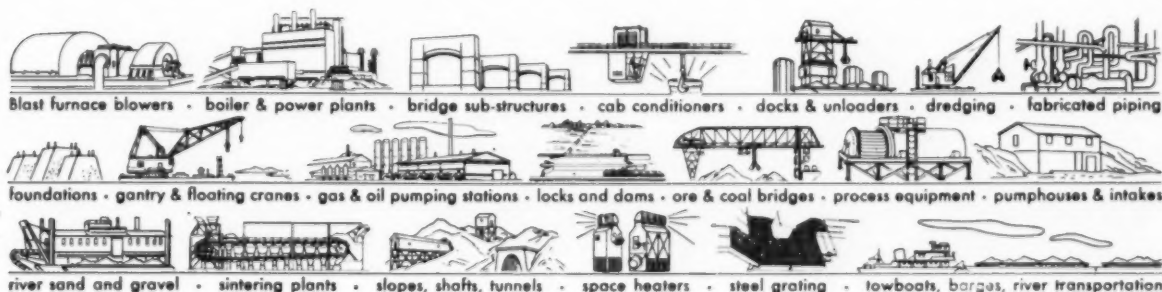
struction jobs can be found in Lake Superior, where a complete harbor and dock facility for ore boats has been completed . . . in New Orleans, where four main piers for the nation's longest highway cantilever bridge have been built . . . Burnside, La., where special dock and unloading facilities for sea-going vessels, waterway towboats and barges are now under construction.

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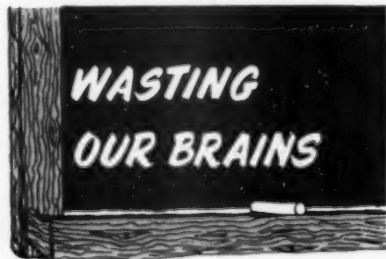
Commonwealth Natural Gas Corp.

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see in this method the potential for a near-perfect combination—with instruction coming from a studio teacher who is expert in presentation of his subject and with assistance coming from the classroom teacher who is best able to aid his students.

• **What's Ahead**—For the present at least, the verdict must remain open. Classroom TV undoubtedly will spread—and probably spread rapidly—as the schools get more experience with it. In some schools it probably will be used to carry much of the teaching load, especially in the tougher subjects where qualified teachers are scarce. In schools where the football coach has been teaching physics, this very likely will be an improvement.

But in schools where the standards are now high and where the community can afford it, television won't be allowed much more than one foot in the door for a long time. There are still too many questions and too many doubts. And most of them won't be resolved until a whole generation of youngsters has grown up with television and gone on to demonstrate in the course of its life and work just how much of the essence of wisdom you can put through a coaxial cable.



Of all the charges made against U. S. education, the most serious and most widely circulated is that it has been wasting the time of its ablest students. It has let them set their own performance standards instead of driving them to excel. It has encouraged them to skip the tough subjects, such as math and science, or has let them take watered-down courses that are fraudulent imitations of the real thing. It has frittered away their time teaching puppetry and family relations and how to behave on a date. It has, in short, made a bunch of intellectual bums out of the men and women who should have been the leaders of their generation.

In the case of a handful of the best U. S. high schools—especially the ones with a high proportion of students bound for college—this is an outright libel.

The standards in the first-rate academic high schools are tougher today than they were 20 years ago, and most of their students will go through

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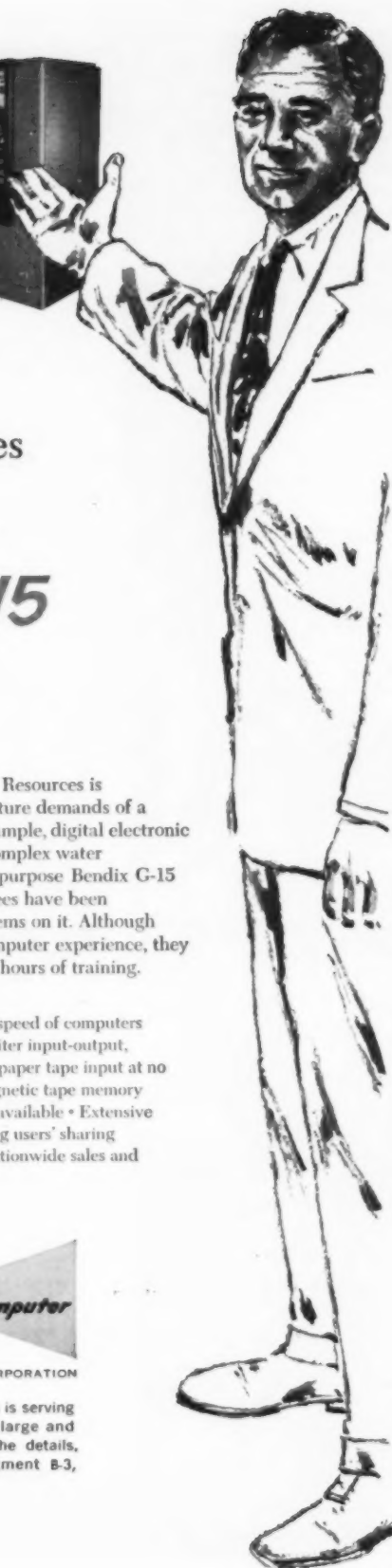
The California Department of Water Resources is preparing aggressively to meet the future demands of a rapidly expanding population. For example, digital electronic computers are speeding solution to complex water conservation problems. The general purpose Bendix G-15 proved so easy to use that 60 employees have been taught to solve a wide range of problems on it. Although most of these people had no prior computer experience, they were writing programs after just four hours of training.

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their whole program without ever hearing the word "elective."

But in the case of entirely too many schools, the charge is pretty close to the truth. For in the 1930s and 1940s a large area of American secondary education succumbed to the doctrine of "child-centered" teaching. Even in its mildest forms this involved de-emphasizing grades and disparaging the importance of academic achievement. Carried to extremes it led to the conclusion that square dancing was just as much a part of man's cultural heritage as algebra and that a course in it should carry just as much credit.

Now the pendulum is swinging violently the other way, and the uproar over Russia's Sputniks is only partially responsible. The high schools have suddenly realized that within a year or two the colleges will be able to pick and choose from the flood of applicants that will besiege them.

Brewing a Challenge

And so high schools all over the country are starting to tighten their requirements. Guidance officers are getting the word to "challenge" the bright students with a tough schedule, and never mind the electives.

In fact, it is hard to look at what is going on without feeling a quick stab of pity for the bright youngster who is coming up to high school in the next couple of years. A decade ago it would have been a cakewalk; now they are laying for him. He is the engineer who will build the rocket that goes to the moon; or he is the statesman who will guide the world that the engineers make; or the poet who will find its soul. In any case, he must work like a son of a gun, and they will do everything but beat his bare bottom with sticks to see that he does.

Who's To be Educated

Some months ago, the Carnegie Corp. commissioned Dr. James B. Conant, former president of Harvard and former ambassador to Germany, to make a comprehensive study of the U.S. high school and determine just what it should be doing. Conant's findings are still tentative, but as they firm up they are likely to become a pattern for U.S. secondary education—not only because they have a strong body of reasoning behind them but also because they are things on which a large number of top educators already agree.

Conant and like-minded educators

Outdoor Station

features

Wide Range of Allis-Chalmers Equipment

Here's the new addition to the Palatka Station of Florida Power and Light Company, which was engineered and constructed by Ebasco Services Incorporated. This new power station symbolizes the growth, the drive, the fresh modern look that is everywhere in sunny Florida today. It also offers testimony to the close coordination and planning between engineers from the utility, Ebasco, and Allis-Chalmers on a wide range of problems.

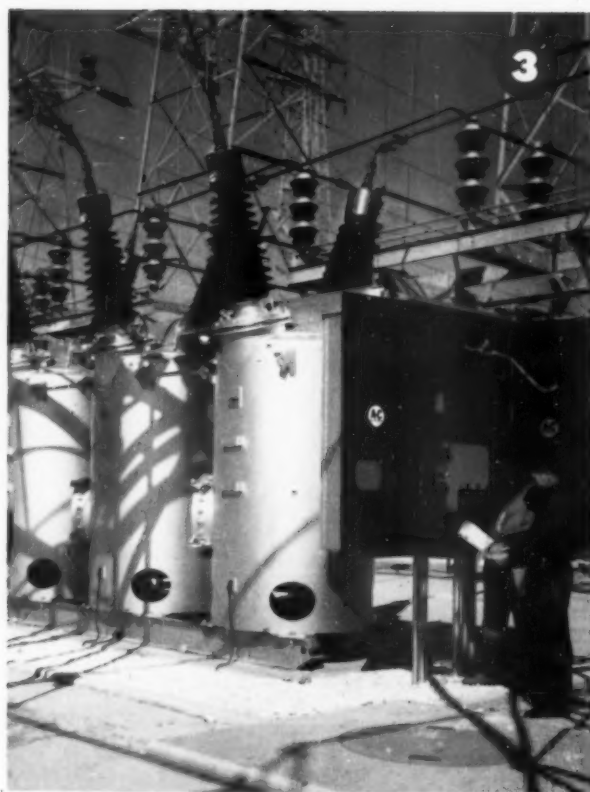
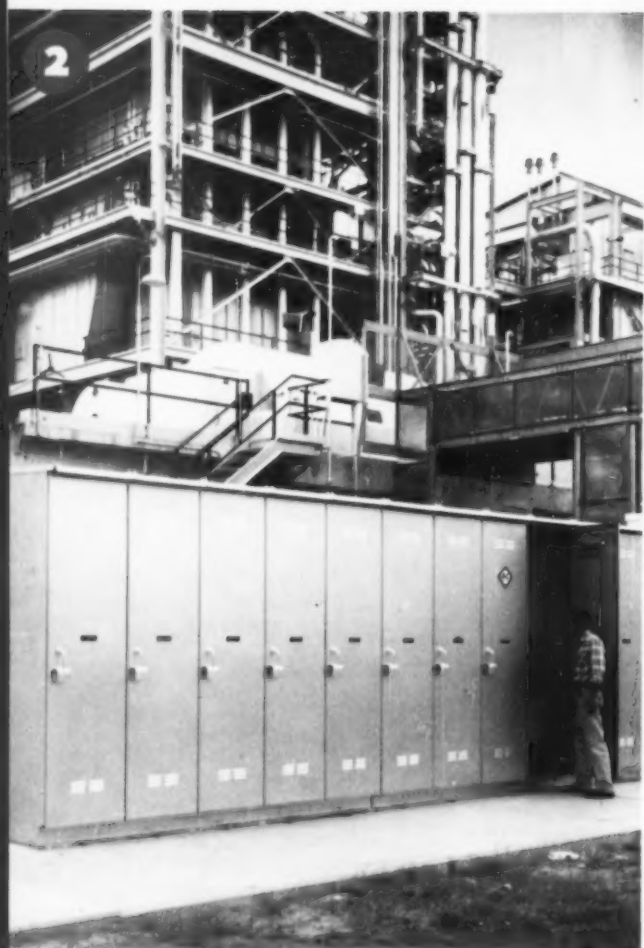
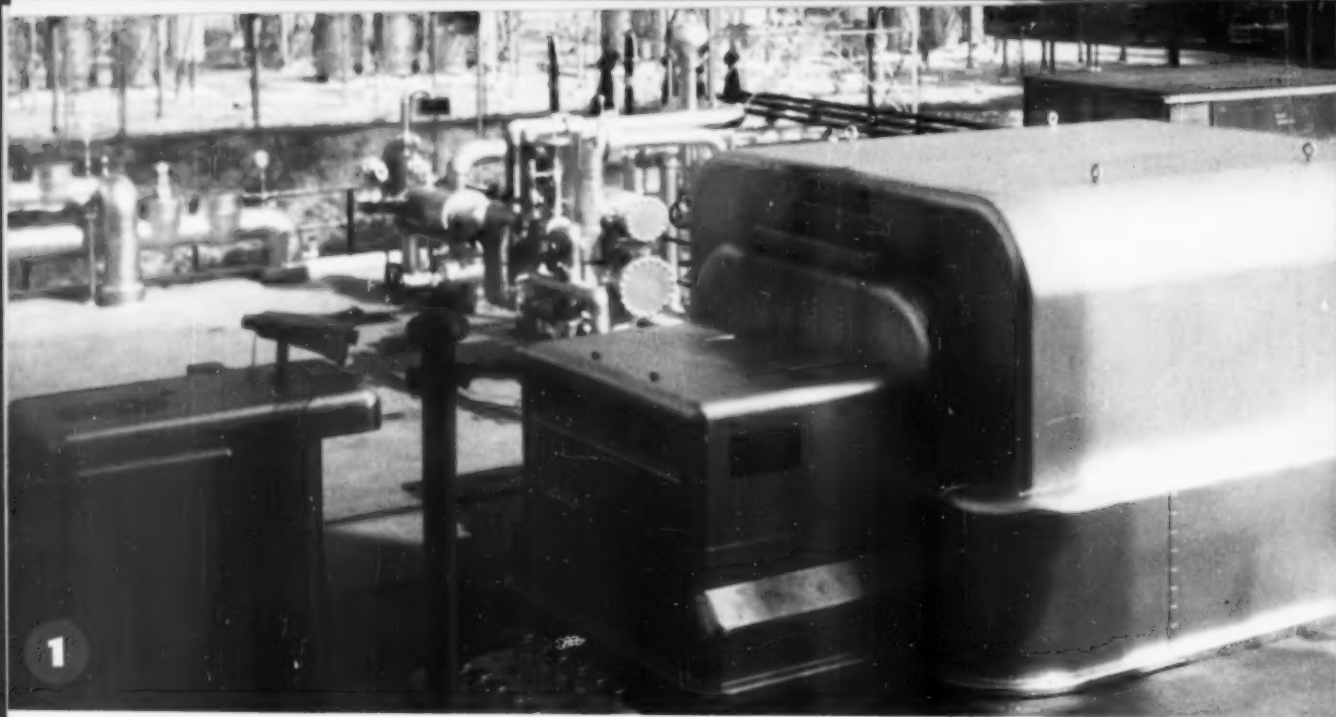
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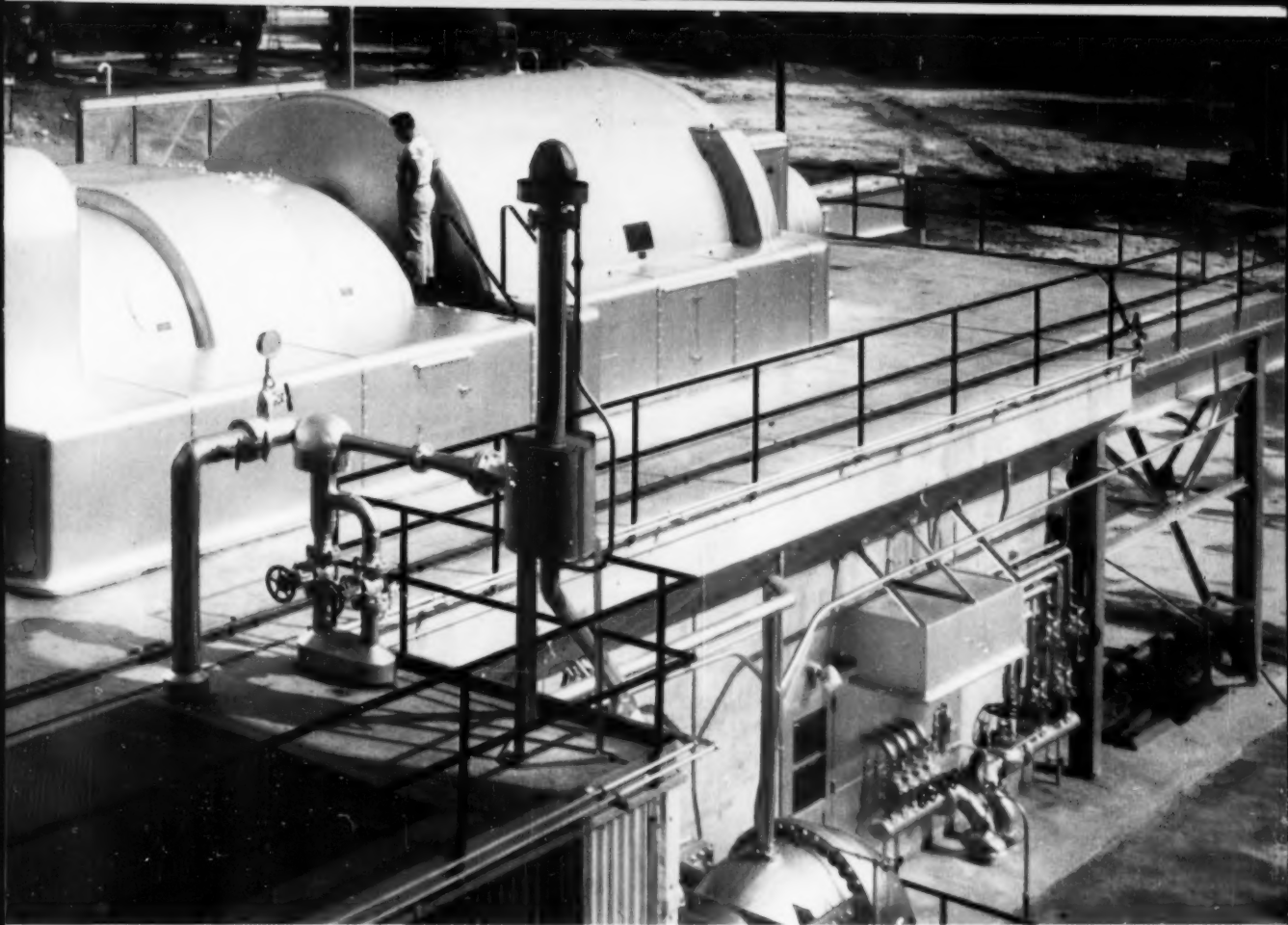
Palatka Station

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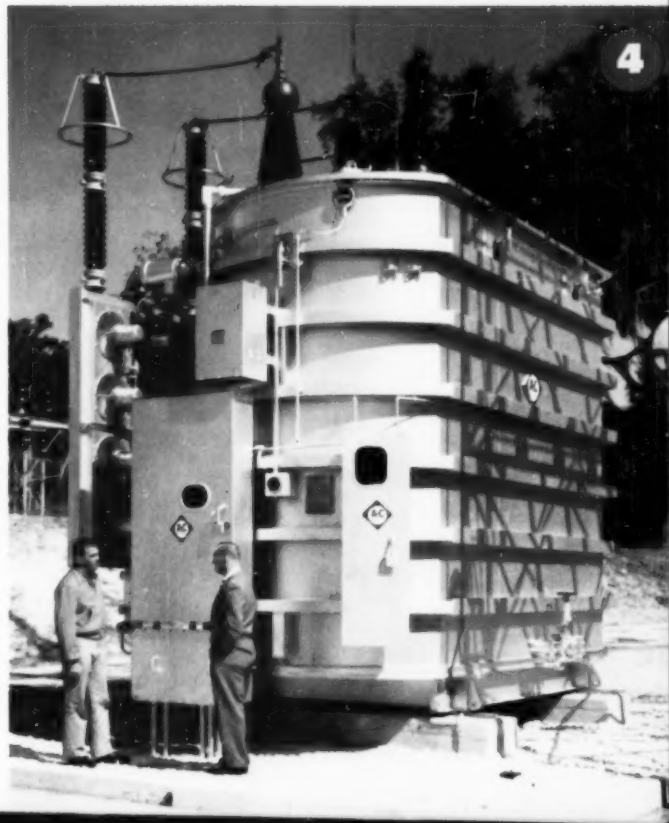
2. Switchgear — Allis-Chalmers 2400-volt and 480-volt outdoor weatherproof switchgear controls major station auxiliaries.

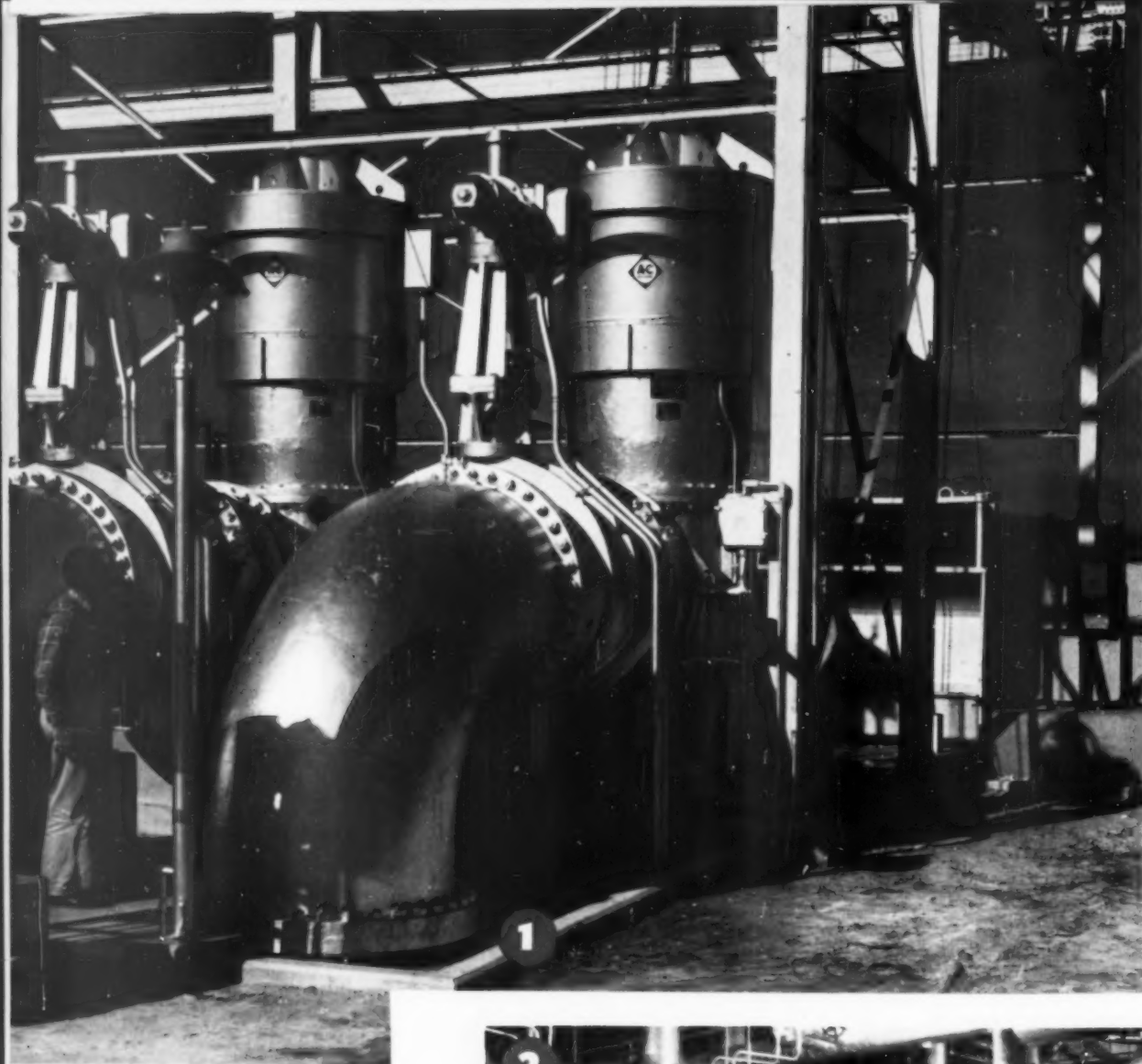
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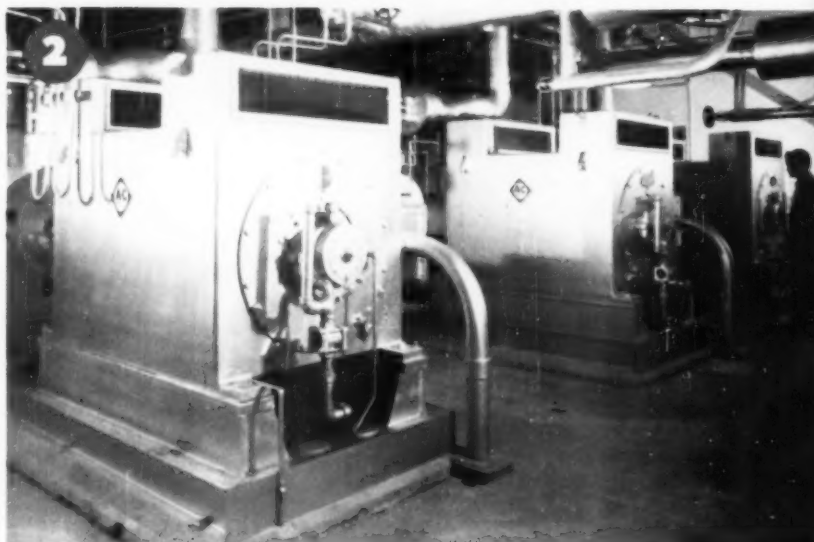




1. Pumps-Motors — Shown above are two vertical weather-protected motor-pump units furnished by Allis-Chalmers.

2. Control Centers-Motors — For boiler feed pumps; induced and forced draft fans were furnished by Allis-Chalmers.

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ALLIS-CHALMERS



start with the proposition that only the top 15% to 25% of the population is real college material. This means the group with an IQ above the 110 to 115 level. For the 25% to 35% of the population that falls between 100 and the 110-115 level there should be some sort of education after high school, but not a full four years of college. For those with an IQ below 100, high school would be the end of the line.

• **Pressure for College-Bound**—For the group preparing to go on to college, the prescription is a stiff one—five “solid” subjects each year, or a total of 20 in four years. The typical college applicant would offer four years each in English, history, science, math, and languages. In some cases, she (in these it usually would be a girl) would stress languages at the expense of science or math, but the number of solids would remain the same.

Along with this package of 25 class hours a week would go 15 to 20 hours of homework—for a total of 40 to 45 hours a week. Allowing for lunch periods, activities, and athletics, total time spent either in school or doing school work would run between 55 and 60 hours, which as one educator remarks with grim satisfaction, “won’t leave him much time for throwing rocks at streetlights.”

Speeding the Brightest

Tough scheduling, however, is only half the prescription for forcing the bright student to cash in on his abilities. The other half is to group the classes in each subject according to ability—so that the fast learners can forge ahead and cover more ground in a year than the slow. In academic jargon, this is “homogeneous grouping,” and to a teacher trained in the days of “child-centered” education it is something close to obscenity. For years, all the teachers colleges have damned it as undemocratic and unsound.

Nevertheless, it is the coming thing. In school after school, principals are rearranging the classes to set up two, or three, or more groups that will move at varying speeds. Often they don’t dare tell the parents about it, but the students in the fast groups feel the lash of competition without being told.

• **Revived System**—Thirty years or more ago, homogeneous grouping was common in the larger elementary schools and rare in the high schools. It vanished almost entirely as the principles of progressive education spread. Now it is reappearing in the high schools, and it seems certain to push back into at least the upper grades of elementary school.

It will push back because the schools from here on will be under ever-increasing pressure to cover more ground, and more, and still more. The mass of material that must be taught a boy to make him an educated man is so great that the colleges are demanding that the high schools take on a greater share of it. And the high schools in turn are trying to clear their decks by pushing some of it back into the elementary grades.

Thus, the tougher school systems are talking about getting more formal science into the seventh grade, instead of waiting until the traditional ninth grade General Science to give the student his first laboratory sessions. Others are beginning French or some other modern language at seventh grade or even lower. Still others are shoving algebra back to the eighth.

Doing Colleges' work

Not all sixth and seventh and eighth graders can take this kind of high-protein diet. But those who can often show an astonishing capacity for catching on. One teacher who has been trying his own version of the mathematics of sets on bright sixth graders is convinced he could take them to the level of college algebra if he had to.

At the upper end of the public school ladder, the high schools are experimenting with ways to take on more college-level work. The most promising project of this sort is the advanced placement program, which is at present operating in 212 high schools around the country.

Under this program, talented students in a variety of subjects (English, science, history, math) work in small groups on what amount to individually tailored programs that go far beyond the ordinary high-school material. If they do the work satisfactorily, the colleges they go to will give them actual course credit for it. A bright student can check in for his freshman year at a university with a couple of course credits already due him.

The Ford Foundation is sponsoring a somewhat similar experiment in a limited number of schools, but under its system the students actually finish with high school in three years and go on to college a year earlier than usual.

• **Express Route**—There will be more of this as time goes on. Eventually, the schools will develop a sort of fast track that starts well back in the elementary grades and runs through college to graduate school. Not everyone who goes to college will travel this track. But the bright students who mature early will

use it to cut down the total time consumed in the long haul toward a professional degree.

Educators in general like the idea of a fast track better than the various proposals to set up separate schools for the bright students. As long as all students go to the same school, they can be thrown together in home rooms, in athletics, and in extra-curricular activities. This will keep the bright students from losing touch entirely with the rest of their generation, and it will at least partly answer the objection that ability grouping breeds snobbishness.

Outside the education profession, there is more enthusiasm for the separate school. Rear Adm. Hyman G. Rickover, for instance, has proposed testing all children at elementary level and pulling out those with scientific talent for high-pressure education in special academies.

Some big cities already are doing this with special high schools of science or special schools for the gifted. But for most school systems there is a fatal objection to the plan, quite aside from the question of whether it is democratic. In most districts, there aren’t enough bright children to justify a separate high school, let alone a separate scientific school.

The fast track, therefore, promises to become the pattern. And the very existence of such a track in a school will help eliminate one of the principal criticisms of U.S. education—the charge that it is anti-intellectual and puts no real premium on academic achievement. If the road is there, then the reward for following it will be self-evident.

• **Vocational Training**—As Conant and other educators see it, separating the bright students and providing them with their own road won’t mean consigning the less talented to outer darkness. On the contrary, it will enable the schools to offer courses specifically tailored to their needs—courses that will provide real vocational training to meet the demands of a complex and highly mechanized world. These won’t be soft courses; they will have standards of their own, and they will demand hard work of the students who take them. But their complexion will be less intellectual than the courses the college-bound students take, and they will be geared to a lower level of academic talent.

Some of the students who take these courses will go on for an additional two years of training at a community college or technical school. Others will go to work as soon as they finish high school. To provide more incentive and to keep the vocational courses from becoming mere dumping grounds for the untalented, the schools will try to get students “committed” fairly early in

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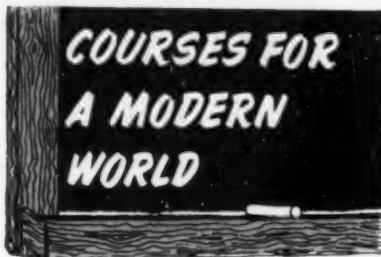
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On Massachusetts Avenue a couple of blocks from the Charles River, in Cambridge, there is a modest building that used to be a tire store. This is the headquarters of an organization called the Physical Science Study Committee. And it is the point from which many educators hope a whole new approach to secondary school teaching will come.

The Physical Science Study Committee was formed in 1956 with a grant from the National Science Foundation. Its purpose is to overhaul and update the science curriculum of the nation's high schools with several objects in mind:

- To bring high school science courses into line with scientific developments of the past generation—so that students won't spend an entire physics course on Newton's laws and then hustle through atomic theory in the last two weeks.

- To give the student who takes a science course some feel of what science really is instead of trying to excite his flagging interest with a confusing assortment of practical applications.

- To make science easier to teach—so that inexperienced high school teachers won't make hash of it.

- To make laboratory demonstrations cheaper and at the same time more pertinent to the course.

So far, PSSC has been administered by the Massachusetts Institute of Technology's Dept. of Sponsored Research. But it is now in the process of setting up as an independent corporation, backed by a group of universities. As such, it will be a permanent institution, and it will make its weight felt increasingly as time goes on.

A Radical Start

Top man on the PSSC project is Jerrold Zacharias, Professor of Physics at MIT. Hard driving, enthusiastic, convinced that scientists must do something about the teaching of science,

Zacharias started with the idea that the committee would have to throw out the old curriculum, bag and baggage, and work up a new one.

As a first step, PSSC has undertaken to develop a brand new physics course for the high schools. This involves a new text book, a set of monographs to provide further reading, designs for simple do-it-yourself laboratory equipment to illustrate the principles covered in the text, and a series of teaching films to show what can't be covered in the lab. Along with all this will go teaching manuals, film notes, and appropriate examinations.

- **A Shocker**—The new text will be something of a shocker to old-line physics teachers. It has little to say about practical applications and homely examples, which have been the standard device for bringing science down to the high school level. It starts with the fundamental physical concepts of time, space, and matter, goes on to cover measurement, and then buckles down to an intensive study of wave theory and the behavior of light. In the second half year, it gets into dynamics, Newton's laws, electricity, and electromagnetic waves. From there it follows the concepts of energy states and wave phenomena into nuclear physics.

To get all this in, the PSSC text does some ruthless pruning of conventional material. Heat and sound get no independent treatment. Hydrostatics and hydrodynamics drop out entirely. The bonus that PSSC collects for this approach is a chance to present physics as an integrated way of looking at the universe instead of as a patchwork of unrelated "laws."

Part of the PSSC project is a massive retraining program for science teachers. Zacharias says his objective is to train 10,000 physics teachers in five years, and he means to keep a firm hand on the training. If the teachers colleges want to get in on it, they will have to get qualified physicists to do it.

- **Swift Progress**—This year, eight schools are trying the PSSC physics course on an experimental basis. Next summer, the committee hopes, with the help of teachers from these schools, to train 250 more teachers at summer institutes sponsored by the National Science Foundation. The following summer it is shooting for 2,000 teachers, which means that by the fall of 1959, some 40,000 students would be getting the new course.

Once it has the physics course licked, the PSSC is thinking of working up a two-year course combining physics and chemistry. Where it goes after that is uncertain, but if the new approach to physics works as well as Zacharias hopes, it undoubtedly will be applied to a wide range of other subjects. Mathematics, for instance, is long overdue for



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the kind of overhaul that PSSC is giving physics, and several top mathematicians are now talking about starting a similar project.

Colleges Move in

In many ways, the most important thing about PSSC is not what it is doing to the physics syllabus but the fact that a college-level group is finally taking some responsibility for helping the secondary schools to solve their problems. College professors have never stinted in their criticism of what the high schools are doing, but they rarely have taken off their doctoral robes and wrestled with the problem of just how to make the high schools do better. This they left to the schools of education, and since the schools of education have been absorbed with problems of teaching method rather than content, no one has put his mind on the question of subject matter.

Some of the professional educators are a little miffed at the Zacharias approach and are watching suspiciously to see if the new physics course, with its concentration on theory and the broad approach, violates what they consider sound teaching method. Zacharias himself isn't worried. "There's no conflict between subject matter and methodology in science," he declares. "The method of teaching is a reproduction of the methods by which the subject was developed. The two are all tied up together and you can't separate one from the other."



The problems that face U.S. education in the immediate future are formidable—upgrading faculties, revising courses, providing the physical facilities for the fast-growing school-age population. In general, though, they are problems for which we can see some answers. It probably is safe to say that there is nothing the matter with U.S. education at this moment that can't be fixed by spending more money judiciously and by applying the best of the existing educational techniques.

But looming up in the not-so-distant future you can see the outlines of some

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But the important fact is this: Chrysler's AIRTEMP costs *far less* in the long run because it minimizes the 3 "secret costs" of air conditioning. And these may be more important than the first cost!

THE SECRET COST OF WRONG EQUIPMENT

The wrong equipment can be troublesome as well as costly to operate. Airtemp makes all kinds of air conditioning—over 297 models—and can advise you which is best for your needs. If you wish, our Airtemp Construction Division will recommend a qualified engineer and contractor near you and work with them. You're sure to get exactly the right equipment from Airtemp!

THE SECRET COST OF OPERATION

Operating costs over a few years may actually

exceed the first cost of air conditioning. But rock-bottom operating costs can save you substantial sums. That's why you should know that AIRTEMP—thanks to Chrysler engineering—promises the lowest operating costs in the industry!

THE SECRET COST OF MAINTENANCE

Maintenance costs and repair costs can be a shock. A breakdown brings repair bills PLUS the cost of lost time, lost business. But Airtemp air conditioning is carefully engineered by Chrysler for trouble-proof operation. And Airtemp is installed only by qualified contractors, who must certify to Airtemp that equipment warranted for 5 years has been installed properly. That's why Airtemp maintenance costs average out to be the lowest in the industry!

May we give you the complete facts? For prompt action mail the coupon below. Or phone your nearest Airtemp contractor or dealer, listed in the Yellow Pages.

CHRYSLER

Airtemp

AIRTEMP DIVISION, CHRYSLER CORP.
Dept. BW-4-58, Dayton 1, Ohio

We would like the full facts on how Airtemp controls the 3 "secret costs" of air conditioning.

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means many things
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Birmingham Tank Company, Sales Offices: New York, Pittsburgh, Chicago, Atlanta, New Orleans, Pascagoula.

The Ingalls Shipbuilding Corporation, Shipyards: Pascagoula, Mississippi; Decatur, Alabama
Sales Offices: New York, Chicago, Washington, Houston, New Orleans, Atlanta.

problems for which the answers are not so evident.

• **What's Education?**—One problem arises out of the breath-taking rate at which human knowledge is growing. In Elizabethan times, it was possible for an educated gentleman to know everything—in the sense that he could master the basic principles in all known fields. Since that time, the body of knowledge has become too much for any one man to master. Educated men have been forced to become specialists—and thus have ceased to be educated at all, in the Elizabethan sense. With each year that goes by their specialties narrow, and the time they spend in training lengthens.

A related but somewhat different problem arises from the fact that U.S. society is demanding a higher and higher level of education from all its citizens (BW—Apr. 27 '57, p176). The spread of automation is steadily eliminating the jobs that call for a strong back and a weak mind. It is creating new jobs in their place, but these new jobs call for a higher order of skill and intelligence.

For the schools, both these problems come down to much the same thing: There will be ever-increasing pressure on them to pack more and more learning into their graduates. The bright students will have to be given a flying start down the long roads that lead to their specialties. Even the dull-est somehow will have to be upgraded to meet the minimum demands of an automated system.

"Look at our math program," says one suburban high school teacher. "They're already talking about giving statistical inference and polynomial calculus to the bright students, and that I can do. But someday everybody will have to take it because someday it will be vocational education. Vocational training then will be how to program a computer or how to fix the circuits in a feedback."

This may not mean, as another teacher suggests, that the mothers of the next generation will have to seize on a baby's discovery of its fingers and toes to get in some fast instruction in the decimal system. But it does mean that the schools will have to make sweeping revisions in what they teach and the way they teach it. The kind of thing that the MIT Physical Science Study Committee is doing to physics will have to be done to the entire elementary and secondary curriculum.

• **What's Intelligence?**—It also means that there will be a desperate search for something radically new and more effective in education—something that will not just feed information into the mind but will actually increase what we think of as intelligence itself.

The idea isn't so fantastic as it



I. J. BARRON, Secretary, Aluminum Suppliers, Inc., Canton, Ohio, reports:

"We built our 30,000 sq. ft. pole-type warehouse on Penta-treated poles for just \$1.92 per sq. ft."

"In our business as aluminum building supply distributor, we need plenty of room to store aluminum roofing, siding, windows, storm doors, storm windows, flashing and other building supplies. Pole-type construction really filled the bill for us. Our 300' x 100' warehouse cost only \$1.92 per sq. ft. This cost included a 6" concrete floor, aluminum roofing and siding, loading docks, and a 30' x 100' office

area with heating and air-conditioning equipment."

PENTA*-TREATED POLE BUILDINGS are strong, wind-resistant, flexible and practical. Penta keeps rot and termites out of poles, leaves them clean and easy to handle. For more facts and photos of pole buildings, return the handy coupon today. **THE DOW CHEMICAL COMPANY, Midland, Michigan.**

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- ☐ Send me photographs and cost figures on 20 different types of pole buildings.
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OIL AND NATURAL GAS

The Middle South—Arkansas, Louisiana and Mississippi—produces one-seventh of the U. S. petroleum and one-fifth of the U. S. natural gas. In addition, since 1950, the Middle South accounted for 28% of the net increase in U. S. crude oil reserves, and 32% of the net increase of U. S. natural gas reserves. These growing reserves have spurred millions of dollars for new plants and expansion of existing plants—confirmation and re-confirmation of confidence in the future of the Middle South.

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Jackson, Miss.

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New Orleans, La.



sounds. Psychologists have known for years that an IQ rating is not necessarily something God-given and unchangeable. It depends to some extent at least on environment and family background; it will vary with the emotional state of the subject; and it sometimes will jump dramatically and apparently permanently in a short span of time.

What makes it jump? Could it be made to jump still more? With the right incentives, the right teaching methods, the right environment, could everyone's mind be made to jump? And could a civilization thus raise itself by its own bootstraps until all its men became as angels?

These are questions for which nobody now has answers. Psychology is a young science, and it has not yet even identified objectively the quality that we mean when we speak of intelligence. So far, research into the process of learning is about on the same level as James Watt's experiment with the teaspoon and the teakettle.

• **End of the Greeks**—But in the long pull these questions will come more and more into the foreground. And if any answers emerge, they may change the whole approach to education more radically than anything that has happened in the past 30 centuries.

As one educator with a philosophical turn of mind sums it up, "We are still teaching our children the way the Greeks taught theirs—only usually not so well. We just pour in the information, as though the child's head were a barrel, and when finally we realize that no more is going in we stop pouring. Some day we are going to find what the learning process really is. And when that day comes, the human race will really start getting somewhere in the world."

Class Dismissed

REPRINTS AVAILABLE

Single copies of this article, U. S. Education—plus the first part published in BW last week—will be available in about four weeks to BUSINESS WEEK subscribers upon request without charge. Other copies will be billed at the following rate: 1 to 10 copies, 50¢ each; 11-100 copies, 40¢; 101-1,000 copies, 30¢; over 1,000, prices on request. Address orders for reprints to Reprint Dept., Business Week, 330 West 42nd Street, New York 36, N. Y.

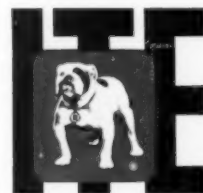


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**CHEVY TAMES THE WILD ANDES WITH
HOOD SEALED SHUT!** *New Turbo-Thrust V8 climbs
two miles in the sky, runs ocean to ocean across South America
and back — without adding a drop of oil or water or even
turning the engine off!*



Record-setting Chevy flattens one of the fantastic grades in "sealed-hood" assault on the Andes.

We picked the world's toughest transcontinental highway to test the superb new Chevrolet. We pitted a station wagon, equipped with Chevy's radical new Turbo-Thrust V8 engine and Turboglide transmission, against the 1,000-mile General San Martin Highway that writhes over the most forbidding mountain range in our hemisphere.

To make it tougher we had the Automobile Club of Argentina seal the hood! *This* engine had to run like clockwork all the way from Buenos Aires on the Atlantic to Valparaiso, Chile, AND BACK without adding one drop of oil or water, without the slightest adjustment!

A. C. A. experts said the run couldn't be made under those conditions. But 41 hours and 14 minutes later they wrote a new record in their books. Chevrolet had hurtled across the sun-parched pampas, swirled up unbelievable grades that sometimes topped 30 percent. The deep-chested Turbo-Thrust V8 jetted a torrent of power in the thin air at the 12,572-foot summit, new Full Coil springs turned raw rock into velvet underfoot, Turboglide fed jolt-free acceleration to the treacherous road. Down and down the Chevy plummeted to the Pacific—and back again over the same rutted trail.

Back again to Buenos Aires and a new record! Back again (and its engine had never been turned off!) with proof that Chevrolet will soar over any hill, any washboard back road, any savage set of curves you may ever meet with a serene competence that will astound you. But why not see your Chevrolet dealer and sample that wonderful feeling firsthand? . . . Chevrolet Division of General Motors, Detroit 2, Michigan.

CHEVROLET



Going up massive foothills of the Andes Turboglide's triple-turbine smoothness gave steadier footing on treacherous gravel turns; Grade Retarder saved brakes on way down.



Terrific reserve of torque from Turbo-Thrust V8 made even the 12,572-foot summit seem easy. Oil dipstick still showed "full" at end of 1,900-mile transcontinental test.



Full Coil springs gave remarkable ride on rough going—even through hub-deep streambeds across primitive roads. "Four-link" system added stability on curves.



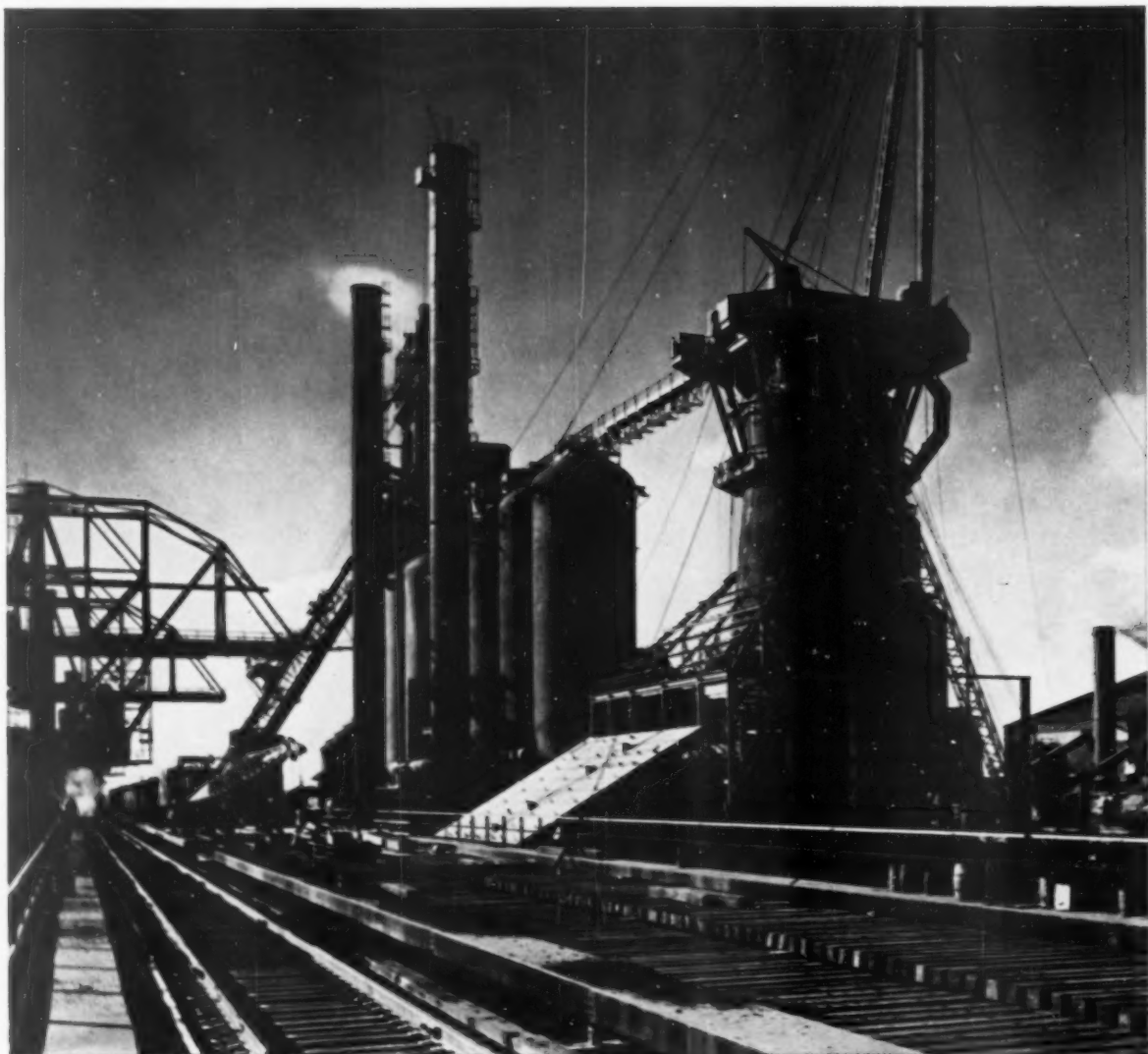
No guard rail!—but Chevy's famous precision Ball-Race steering guided car exactly where drivers aimed it on perilous hairpin turns, cut down markedly on fatigue, too.



Twist and strain of endless curves, brutal jolting of boulder-filled road underscored torsional rigidity of new Safety-Girder frame. Lower weight-center aided roadability.



Countless emergency stops for livestock on road, fallen boulders, "blind" curves gave Jumbo-Drum brakes full opportunity to show their superb stopping power.



Under construction—Trenton, Michigan, Plant

McLouth Blast Furnace No. 2

The second major expansion in four years is nearing completion at McLouth Steel.

We are again adding to our facilities to bring you better steels for the product you make today . . . and the product you plan for tomorrow.

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Detroit 17, Michigan

Manufacturers of high quality stainless and carbon steels.

In Business Abroad

. . .

Indonesia Makes Deal with Red China, Will Trade Tin, Rubber for Rice, Cloth

Indonesia moved a step further into the Communist camp last week when the Djakarta government signed a \$12-million trade agreement with Red China. The deal reportedly will fetch Pres. Soekarno's regime 20,000 tons of rice—to avert famine, especially in Central Java—plus a substantial amount of Chinese cloth.

For its part, Indonesia is expected to supply the Reds with tin and rubber—both badly needed in Communist China's industrial expansion.

This latest move by Soekarno comes on top of Soviet arms purchases (BW—Apr. 12 '58, p. 126) to be used in putting down the rebellion against the central government.

. . .

LeTourneau Will Assist Japanese With Offshore Oil Drilling Rig

Japan will go ahead with plans to search for oil under the Sea of Japan with American assistance. This week, government-controlled Japan Petroleum Exploration Co., Ltd., known as Japex, signed a \$1.5-million technical assistance contract with R. G. LeTourneau, Inc., Longview, Tex., to construct Japan's first offshore oil drilling platform.

Besides blueprints and knowhow, LeTourneau will furnish Japex with motors, gears, and vital components. But the hull and legwork of the floating platform—weighing 4,000 tons—will be built by a Japanese shipyard at Akita, Japan.

In addition to the Japanese government, which owns about 57% of Japex, other non-government stockholders include leading Nipponese refiners Teikoku Oil Co., Ltd., Idamitsu Kosan Co., Ltd., and Koa Oil Co., Ltd.

. . .

Port of New York Opens Offices In London, Zurich to Hustle Business

In response to fast-growing competition from other East Coast ports, the Port Authority of New York took the offensive last week. In London, it opened a new trade development bureau with a lunch for 500 British shippers, traders, and government officials.

The London office and another new one in Zurich, Switzerland, are part of a major push to increase New York's share of trans-Atlantic cargo. The London office will try to sell shippers in Norway, Sweden, Spain, and Portugal, in addition to Britain; the Zurich office will work to influence shippers in other European countries to use New York's port facilities. One of the Author-

ity's first tasks is to counter the poor publicity the port gets overseas because of the dock labor trouble—troubles that flared anew this week.

During 1956—last available year for figures—New York handled 16% of the total tonnage between Britain and the U.S. This represented 38% (\$260-million) of the total dollar trade between the two countries.

. . .

India Gets Two World Bank Loans To Refurnish, Expand Port Facilities

In an assist to India's Second Five-Year Plan, the World Bank has made two loans to India, totaling \$43-million, for port improvement at Madras and Calcutta.

A loan of \$29-million will go to Calcutta to replace old facilities and relieve ship congestion; \$14-million will be extended to Madras for port expansion to meet traffic demands over the next 10 years.

Besides the World Bank, three U.S. banks are participating in the two loans to the extent of \$1.7-million. The Bank of America and the Chase Manhattan Bank together are taking slightly over \$1-million of the loan to Calcutta, while the Irving Trust Co. is putting up \$592,000 of the \$14-million Madras loan.

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Tulsa Sends a Mission to Moscow To Invite Soviet Participation in Show

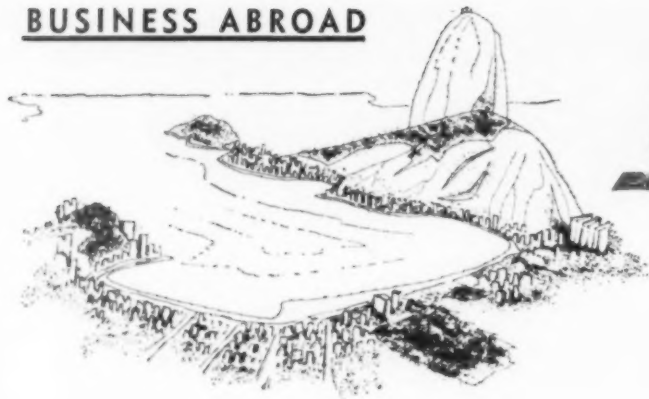
A delegation of Tulsans is enroute to Moscow to invite the Soviet to participate—for the first time—in their city's International Petroleum Exposition, one of the world's biggest industrial shows.

Last held in 1953, the Tulsa exposition is a showcase for the industry's equipment and supply business. Next year's show, to be held May 14-23, commemorates the 100th anniversary of the first oil well in Titusville, Pa.

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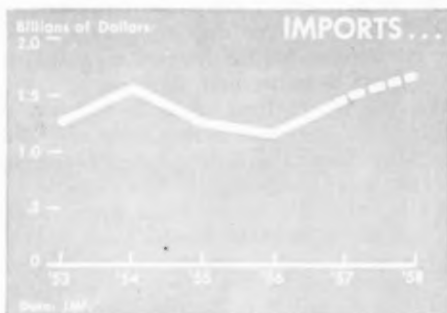
Business Abroad Briefs

Britain's Imperial Chemical Industries, Ltd. and its subsidiaries report record sales of \$1.3-billion for 1957, up 6.3% over 1956. Consolidated profits after taxes totaled \$172.2-million. . . . Brazil's \$40-million contract for Furnas Dam in Minas Gerais state, touted as the biggest dam in South America, went last week to George Wimpey & Co., Ltd., a British construction firm. . . . Argentina's National Railways placed orders totaling \$4.3-million with Car Foundry Div. of ACF Industries and Magor Car Export Corp. of New York, for hopper-bottom cars. . . . West Germany's IT&T subsidiaries Standard Elektrik AG. and C. Lorenz AG., both of Stuttgart, were merged into a new company to be called Standard Elektrik Lorenz AG. . . . Mexico's Monsanto Mexicana S. A., subsidiary of Monsanto Chemical Co. of St. Louis, will build a \$2.4-million chemical plant at Lecheria, Mexico.

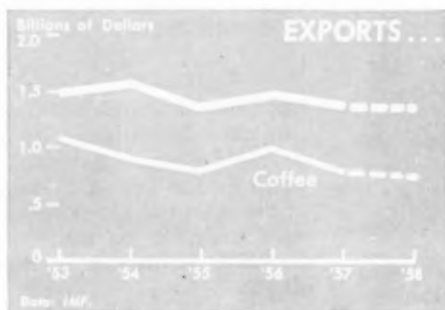


Brazil

boasts an industrial boom — and has new factories to prove it. But the coffee crisis is putting the economy through the financial wringer.



... are a must — especially oil to keep the economy humming and machinery to develop new, diversified industries... And Brazil would buy more if it had more foreign exchange in the bank.



... are the economy's lifeblood, with coffee paying around two-thirds of the import bill — along with cotton, cocoa, minerals... But coffee earnings look bleak for the long term.

Digging Its Way Out of Coffee

The charts (above) picture a country living beyond its means. They don't necessarily spell financial disaster—but they do indicate a major crisis.

This is the state of Brazil today—a country with 62-million people and with an expanding economy, but one still heavily dependent on a single commodity, coffee. Coffee created the present crisis, as it has often done before.

This time, with Brazil's ambitious program of economic expansion and industrialization at stake, even optimistic economists in Rio de Janeiro—who usually see brightness when everything is

gloom—believe that the country has reached a turning point in its postwar development.

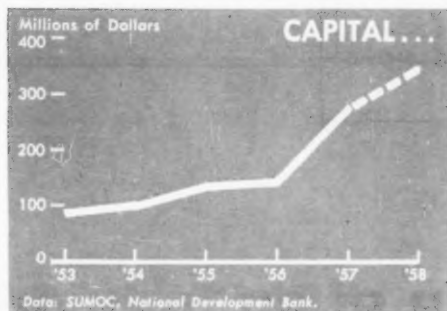
• **Economic Prescription**—Brazil's economists say the country should face up to the decline in its share of world coffee consumption and the long-term trend toward lower coffee income. It should set its sights on developing more diversified exports to create new income and cushion the boom-and-bust cycle of coffee earnings.

Side by side with this, say the economists, Brazil should stop clinging to its built-up, economically prosperous coastline (map) and develop its vast interior

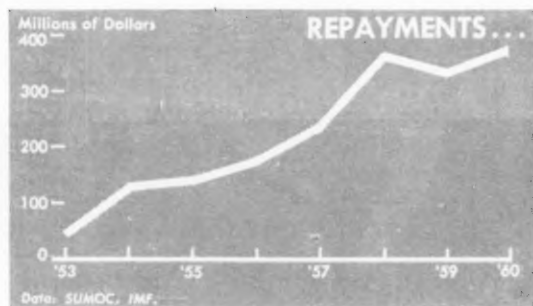
—for decades, a financial drain on the richer areas.

• **Big Losses**—Hard economic facts have demanded this new self-appraisal in Brazil. Last year, the country racked up a \$160-million deficit in its foreign payments—largely because it didn't earn enough from coffee to pay for its high volume of imports.

Last week, this imbalance showed up in the free-market rate for the cruzeiro —120 to the dollar, compared with around 70 a mere nine months ago. Rio and Sao Paulo newspapers gave big headlines to attacks on Brazil's complacent reliance on coffee. Hard-



... flowing in from the U. S. and West European countries is helping build up industry ... But this is a mixed blessing because it means Brazil must earn more dollars to pay investors.



... on over \$2-billion worth of loans extended by the Export-Import Bank, World Bank, and other creditors are a heavy burden ... And — compounding the trouble — Brazil now wants more loans.

bitten economists said that "the bigger the coffee bust, the better it will be in the long run for Brazil."

This does not mean that U.S. businessmen—with more than \$1.3-billion invested in Brazil—or the average Paulista has lost his happy-go-lucky faith in the country's future. Employing nearly 100,000 workers, U.S. subsidiaries in Brazil are doing a boom business—in cruzeiros. But the crisis is bad enough so that the Brazilian government—as has happened before in the past six years—is again looking for bail-out economic aid in Washington.

I. Coffee Spoils Sleep

Coffee is the main trouble-maker.

Thirty years ago, Brazil was selling 14-million bags yearly to a world market of 24-million bags. Now the country is having a rough time selling that same 14-million bags to a world market that consumes nearly 40-million bags. Meanwhile, Brazil has emerged as a potentially rich country with fast-growing needs for imports. Its population is expanding 2.5% yearly. And it dreams of becoming a leading economic power in the Western Hemisphere.

• **Earnings Shrink**—Brazil gets 66% of its foreign-exchange earnings from coffee sales. But its stubborn adherence to the theory of concentrating on low volume and high prices has opened the way for new competitors. African producers, who played a minor role in world coffee sales prior to World War II, have grabbed 25% of the market.

Two years ago, Brazil earned slightly more than \$1-billion from sales of 16.8-million bags; last year, it took in only \$834-million from sales of 14.3-million bags. Even with a temporary rise in sales this summer, Brazil probably will reach yearend with coffee income below last year's level.

• **In a Pinch**—With this decline in coffee earnings, Brazil is in a financial fix—and not just because of difficulties in paying for imports. For one thing, the country is top-heavy with \$2.1-billion worth of foreign debts. It owes more than \$325-million in repayments during each of the next three years. Besides this, Brazil has to pay around \$300-million annually for ever-increasing "service" bills—freight, insurance, other invisibles.

All told—according to SUMOC, the Superintendency of Money & Credit—the country must earn a margin of at least \$600-million a year in foreign exchange, beyond the amount needed for normal imports, in order to pay for these debts and invisible services.

• **Government Support**—The problem is not simply lower coffee earnings. It's also what these do to Brazil in view of its coffee price-support program and Pres. Juscelino Kubitschek's array of development programs ("Fifty Years' Progress in Five Years").

To bolster coffee prices, the government has been buying up and stockpiling coffee. This has swollen the budget deficit—35-billion cruzeiros in 1956 and 41-billion last year—to an all-time high. With an estimated new crop of 24-million bags expected on

top of stocks of 14-million bags, the government will continue to go deeper into debt. It also means that Kubitschek will keep the printing presses grinding out new money—and thus stimulate Brazil's already chronic inflation.

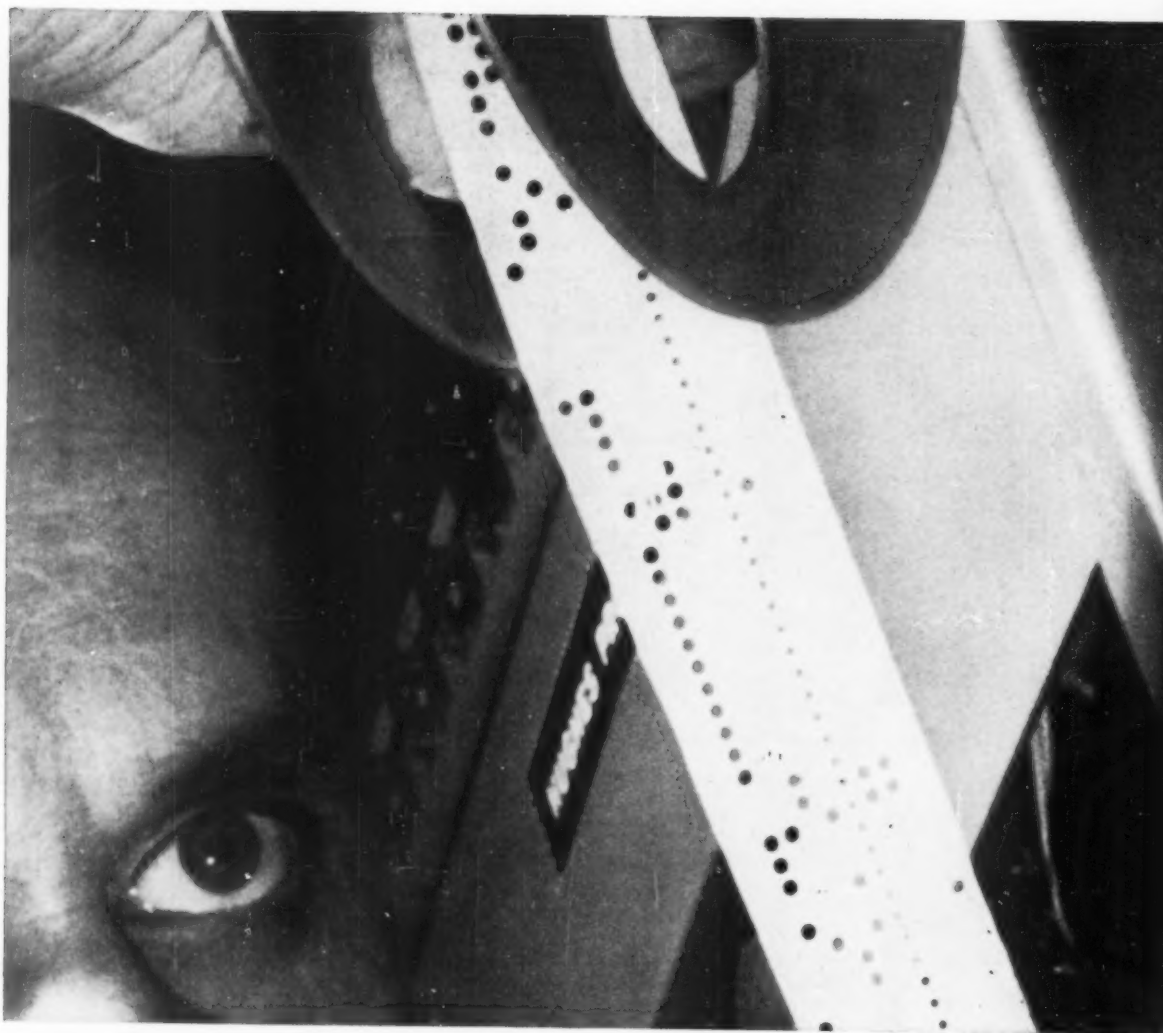
• **Foreign Investment**—Of course, new investments by U.S. and foreign companies help to counterbalance the sag in exports. Rio expects a record \$350-million to be invested this year (though conservative economists put the figure much lower).

However, new dollar investments don't necessarily build up Brazil's foreign-exchange reserves. A large chunk of the investment is in the form of shipments of machinery and equipment, without foreign-exchange cover. And new factories financed, for example, by U.S. companies represent a



CREATING A NEW WORLD WITH ELECTRONICS... NO. 4

Close-up of an industrial



breakthrough

The tiny holes in this punched tape feed instructions to the first all-electronically controlled production line of machine tools ever developed—a series of coordinated machines with the unique capability of performing machining operations on a variety of parts, simultaneously.

By achieving this history-making breakthrough, HUGHES digital controls make possible for the first time "Detroit-type" techniques and economies for small-to-medium quantity production. This new HUGHES system is ideally suited to the trend toward fast-paced changes and shorter production runs which constitute the bulk of all machining done today.

With the HUGHES digital control system, any desired number of machine tools can be integrated into *one* production line. Milling, drilling, tapping, boring, and reaming operations are performed automatically, to precise tolerances. The system provides automatic compensation for dimension tolerances while maintaining production flow.

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This system eliminates costly inventories of small parts. When a reorder has to be filled, or even *one* part is needed, a HUGHES digital controlled production line will turn it out in *minutes*.

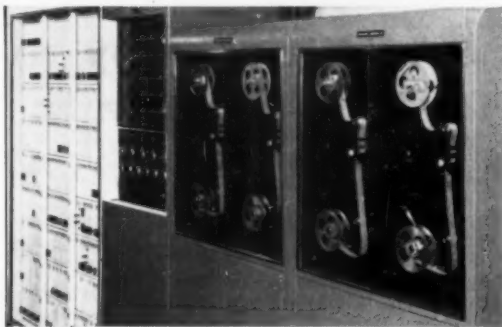
To find out how a HUGHES digital control system can achieve a breakthrough in *your* production of machined parts, please write or telephone—

HUGHES PRODUCTS

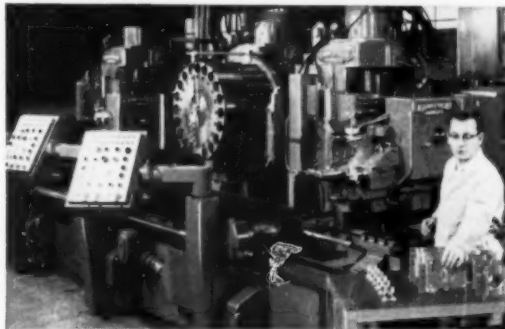
*Industrial Systems and Controls, International Airport Station,
Los Angeles 45, California*



Working from a standard planning sheet a typist (with only one hour of training) can punch a HUGHES digital control tape on the self-correcting keyboard.



The punched tape is then inserted in electronic "readers" that feed the information into control cabinets, automatically converting it into instructions for the machines.



Shown here is a line of milling, drilling and boring machines (Kearney & Trecker) automated by HUGHES controls. Several different parts can be handled by a line at the same time.

Creating a new world with ELECTRONICS **HUGHES PRODUCTS**

GOSH!



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...the all-automatic

DRI-STAT '200'

Here's the photocopier you've been waiting for. Low in cost, high in efficiency, the new DRI-STAT '200' is the first truly automatic office copy machine priced under \$350.

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BW-4

future drain on the country's reserves—profits will eventually be remitted to the parent companies.

II. Building Up Exports

Brazil has already made a good start in trying to diversify exports.

Its biggest move so far is in minerals. Last year, it exported 4.3-million tons of ore—mostly iron and manganese. This brought in around \$100-million. SUMOC is encouraging ore-exporting companies by giving them a better deal on amortizing their investments and on earning dollars.

As a result, mineral development is moving fast, with a variety of projects:

- M. A. Hanna Co. of Cleveland, together with Leo Model of New York, has bought a controlling interest in the iron-rich St. John d'El Rey Mining Co., with properties of more than 100 sq. mi. situated 200 mi. north of Rio in the state of Minas Gerais.

- Cleveland-Cliffs Iron Co., along with Cyrus Eaton interests and Nelson Rockefeller's International Basic Economy Corp. (IBEC), is negotiating to get control of Mineracao Geral Jafet, a steel company with iron-ore properties also in Minas Gerais.

- West German companies are beginning to ship out iron ore—with Mannesmann exporting its first 5,000-ton shipment last month and Ferrostahl preparing to develop iron exports.

- Bethlehem Steel's mining operation in the Amazon area is stepping up shipments of manganese, while U. S. Steel soon will ship its first manganese from property in the state of Mato Grosso.

- **Manufacturers, Too**—Some Brazilian officials believe the country can boost trade in manufactured goods as well as in minerals. They mention light electrical appliances, railroad parts, and auto accessories.

Cobrasma, a licensee of American Steel Foundries, is already exporting axles, couplings, and other heavy railroad gear. Willys is trying to work out a deal for export—2,500 Jeeps a year to other Latin American countries. With W. R. Grace, Champion Paper, and Olin Mathieson moving into paper production, some trade experts see Brazil as an important paper supplier to world markets in the not too distant future.

- **Red Tape Barrier**—Before these dreams come true, Brazil will have to revamp its whole approach to exports. The main drawback now is simply the lack of an "exporting mentality." With price inflation and a 15% yearly increase in the consumer market, manufacturers tend to ignore exports and shoot for big domestic sales.

Moreover, exporters face a "paper curtain" of red tape and all sorts of

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"... Brazil is making big strides in building up industries that will cut its annual bill for imports..."

STORY starts on p. 108

other delays before shipping out goods. Even then, they don't get their moneys worth, because of Brazil's complex, confiscatory exchange system—only 55 cruzeiros to the dollar on exports, instead of the more realistic free rate of more than 110. Thus, most Brazilian economists agree that the government should clean up its exchange system and move to a single adjustable rate—with coffee pegged at first, then worked into the system later.

One factor that may help lure companies toward export is the prospect of a common market within Latin America—or, as will probably happen, regional common markets such as a grouping of Brazil, Argentina, Uruguay, Chile, and Paraguay. But the common market is not just around the corner. Enormous problems of transportation, political rivalries, and tariffs stand in the way.

III. Cutting Need for Imports

Despite export troubles, Brazil is making big strides in building up industries that will cut its annual bill for imports. The emphasis is on creating heavy industry to make capital goods.

In chemicals, an impressive array of U.S. and West European producers—from Union Carbide and du Pont to Hoechst and Bayer—are getting into production of basic raw materials. Japan's Ishikawajima has broken ground for a shipyard in Rio to turn out 20,000-ton ships—and Japanese textile-machinery plants are setting up shop in Brazil. During the 1960s, according to present plans, Brown-Boveri, Siemens, and International General Electric will be turning out heavy electrical gear on a large scale.

As for pharmaceuticals, nine U.S. companies already are in business—and Merck-Sharp & Dohme and Lederle Laboratories both are starting production at new plants. Atomic energy is also getting a play—with a research reactor operating in Sao Paulo, another to produce electric power in the planning stages.

• **Rolling-Stock**—The biggest push to replace imports with local production is in the auto-truck industry. Last year, the industry cranked out 20,500 trucks, 10,590 Jeeps, and 6,750 utility vehicles—with 40% to 50% of their parts made locally. By 1960, the industry hopes to be turning out more than 200,000 vehicles, and, by law they will have to be

produced from more than 90% Brazilian-made parts.

Almost every big-name company in the industry—from General Motors and Ford to West Germany's Borgward—is racing to boost production, with most plants clustered in the Sao Paulo area. In the wake of these producers is coming a host of parts suppliers, including Timken, Bendix, and Eaton Mfg., as well as metal-working companies.

• **Stimulates Demand**—This surge of new industry is putting all sorts of strains on the Brazilian economy. The auto-truck boom alone means increased demand for steel, fuel, and roads. Each of these is a problem:

Steel production—now 1.2-million tons a year—must be increased to 2-million tons by 1960 and 3.5-million tons by 1965. The government-owned Volta Redonda is raising capacity from 700,000 tons to more than 1-million tons, with the help of a \$35-million Export-Import Bank loan.

Belgo-Mineira, financed by Belgian capital, and Mannesmann are expanding capacity. Cosipa, a new Sao Paulo company, is getting set to produce 500,000 tons yearly. And Japanese interests have tied in with Brazilian capital to form Usiminas for producing another 500,000 tons a year.

New roads are a big goal of Kubitschek's government—and a must, if all the new trucks and cars produced are to have anywhere to go. The government hopes to build 7,200 mi. of new roads and to pave 3,000 mi. of old roads by 1960. These will push into the interior—from Belo Horizonte to Brasilia, the new capital city, and on to Belemat the mouth of the Amazon.

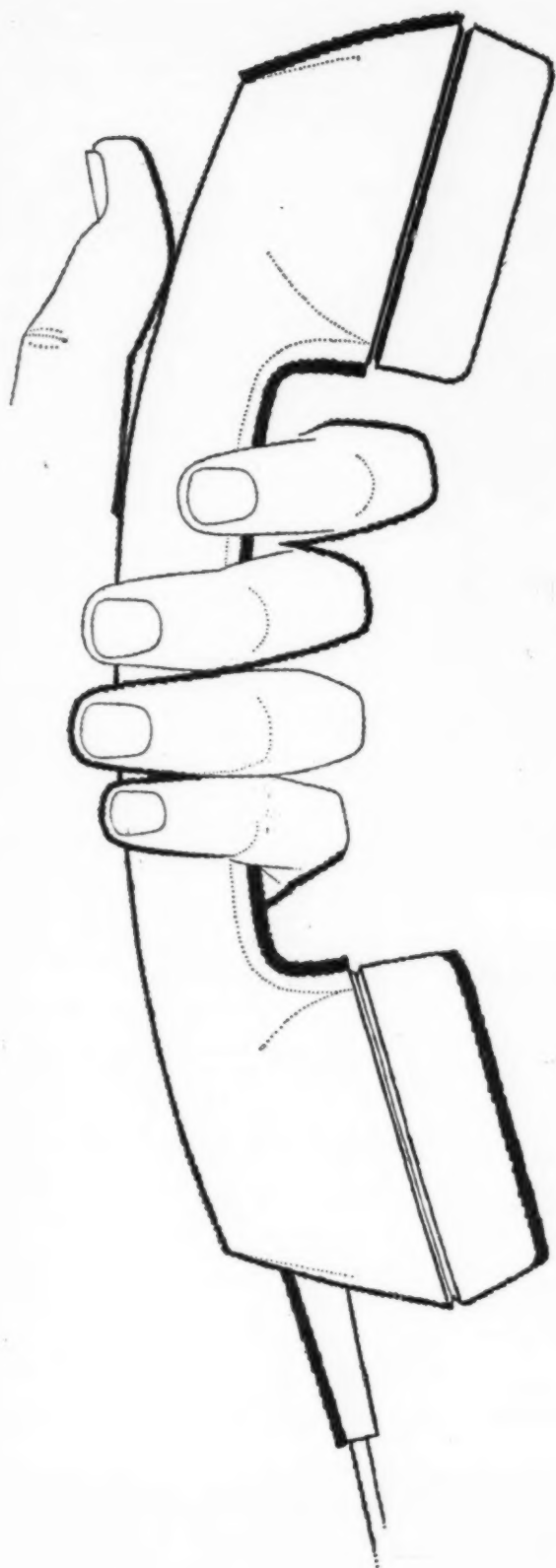
Oil production has risen from 5,000 bbl. a day in 1955 to 40,000 bbl. a day last year. But Petrobras, the state oil company, monopolizes exploration, and Brazil is making slow headway in replacing oil imports by local output.

In fact, its fuel import bill—the largest single drain on the country's foreign-exchange earnings—is rising. It went up from \$187-million in 1955 to \$238-million last year.

• **Developing Interior**—Oil is just one of many reasons why Rio planners are pushing development of Brazil's vast jungle interior. Petrobras is exploring the Amazon for oil. And Brazil recently signed a treaty with Bolivia to allow private companies to prospect for oil along the Brazilian-Bolivia border.

This is all part of Kubitschek's program to get the country "off the beach and into the bush." The Amazon Valley area alone covers 52% of the country, but has less than 3% of the population.

The most dramatic project to develop the interior is the construction—from scratch—of a new capital, Brasilia, located 600 mi. inland. Many observers



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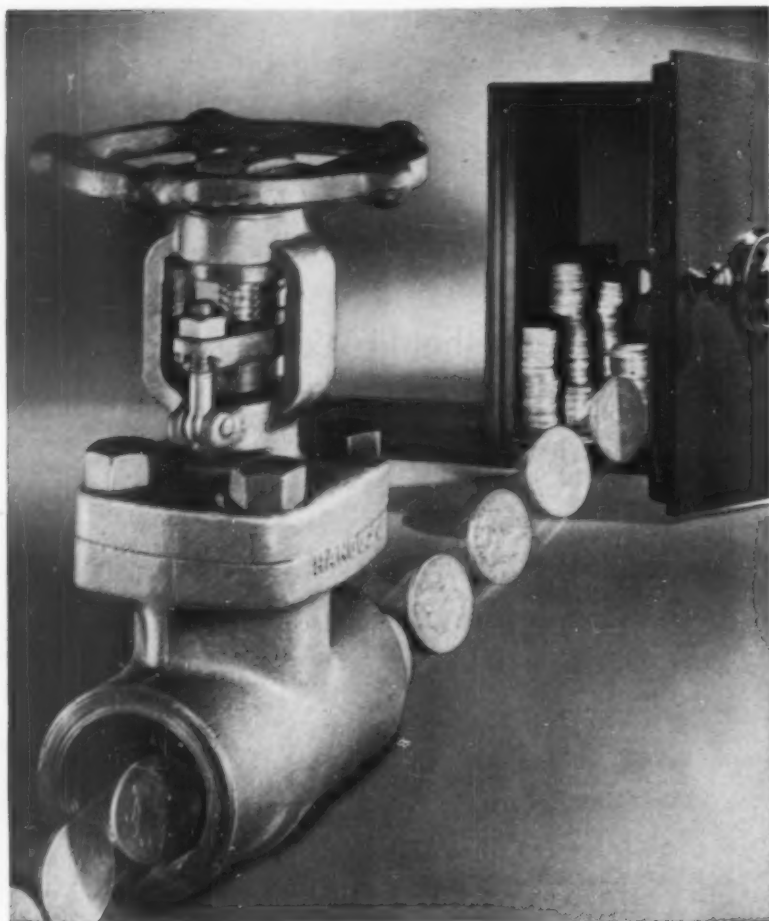
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believe that, in view of Brazil's present financial troubles, this project rates a low priority. But Kubitschek is still rushing construction, and he plans to move the capital from Rio to Brasilia—the "monument of his administration"—by April, 1960.

IV. Credit Rating

None of this planning solves Brazil's present financial mess.

Right now, Rio is asking permission from the International Monetary Fund to withdraw \$75-million—what's left of its original \$150-million quota. Before giving approval, IMF experts—who have just made an on-the-spot study of Rio's financial plight—are sure to recommend that Brazil:

- Alter its fiscal policy to slow down the rise in the country's deficits. In part, that will depend on cleaning up corruption, which is less than in Pres. Vargas' last days but still a factor.
- Tighten domestic credit policy to put the brake on inflationary consumer spending. There are some encouraging signs that Rio is already moving in this direction.

• Make foreign-exchange rates simpler and more realistic.

• **Polite Skepticism**—Few officials in Washington expect to see any sweeping financial or economic reforms in Brazil. They say Kubitschek, who rode into office on Vargas' coattails, is politically too weak to put over a program of belt-tightening. And with nationalism as powerful as ever—in fact, it is rated by one close observer as the most potent factor in Brazil today—the Rio government isn't likely to take advice from anybody.

While optimistic about Brazil's ability to sell a wide range of exports in the long term, Washington still sees coffee as the country's No. 1 problem. Secy. of State Dulles has hinted at a new, more sympathetic attitude toward international commodity agreements. But Washington won't help out until Brazil and other Latin coffee producers talk African producers into a joint commodity export plan.

Officials in the U.S. play down Brazil's trade flirtations with Communist countries—even though Brazil has just signed a \$12-million coffee deal with Czechoslovakia and is talking about a far bigger deal with the Soviet Union. If Brazil should get involved in a wave of firm agreements with Communists countries, Washington is likely to step in with concrete offers of financial help.

• **Still Good Gamble**—Brazil's economic troubles are by no means slowing the rate of private U.S. investments in the country. No U.S. businessman can adequately explain this flood of money going to Brazil. Of course,

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many companies bank on a bright future in Brazil, with hopes that the country will work out its problems. There are other factors, too—the need to pour more money into existing plants to beat out growing competition, and the prestige value of doing business in Brazil.

But one businessman explains it this way: "If a U.S. businessman wants to gamble, he can try two places—Las Vegas or Brazil." So far, most U.S. companies seem to feel that the Brazilian gamble is paying off handsomely.

India's Reds Push New Tactic to Weaken Nehru

To build up electoral support, India's Communist Party has changed tactics—from political power plays to more parliamentary methods.

With the ruling Congress Party's strength on the decline, the Communist switch may prove effective in winning votes—and pushing neutralist India, the political bellwether of free Asia, toward the Soviet camp.

Last year, in their first major victory, the Communists took control of the southwestern state of Kerala. Recently, a Communist became mayor of Bombay—and last week another left-winger was installed as Delhi's mayor. Backed by 250,000 members—four times its strength three years ago—the party is now aiming to capture the states of Andhra, Orissa, and West Bengal (Calcutta) in the 1962 general elections.

• **Election Byplay**—To smooth the way, the party, at its special convention last week, sweetened its tactics by writing a new "democratic constitution." It appealed to the Socialist, orthodox Hindu, and independent opposition to form a united democratic front. It avoided mentioning ties with Moscow, supported Prime Minister Nehru's foreign and economic policies, though mostly by not criticizing them.

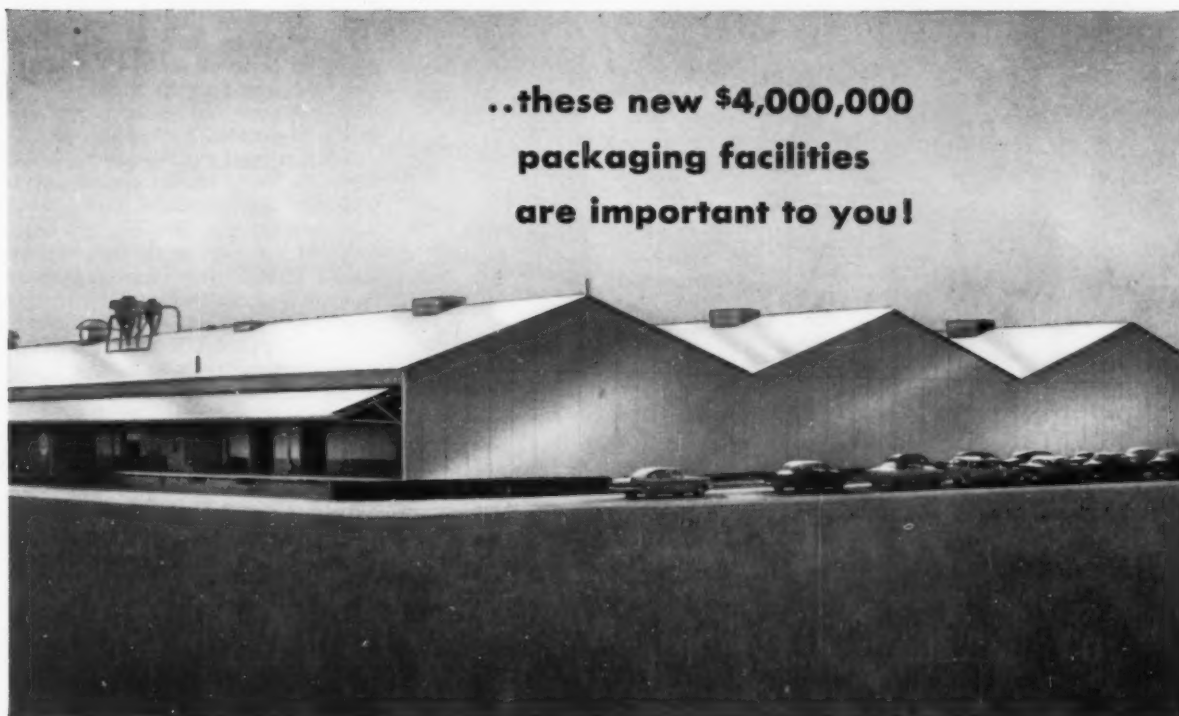
In fact, most of the Communists' mounting strength—and decision to play coy—stems from the Congress Party's own mounting weaknesses. In the three states the Communists are gunning for, Congress politicians have been stumbling over each other—in an atmosphere of corruption and factionalism—to gain office. There, and in other areas, the party has failed to tackle local issues boldly and imaginatively.

• **Counter Measures**—Now the Congress Party seems to be waking up. Top leaders, including Nehru, have ordered drastic disciplinary action against wayward followers. For the May 16 by-election in Kerala, where the Communists hold a one-seat majority, the Congress Party is joining with the Socialists to back a single candidate. **END**

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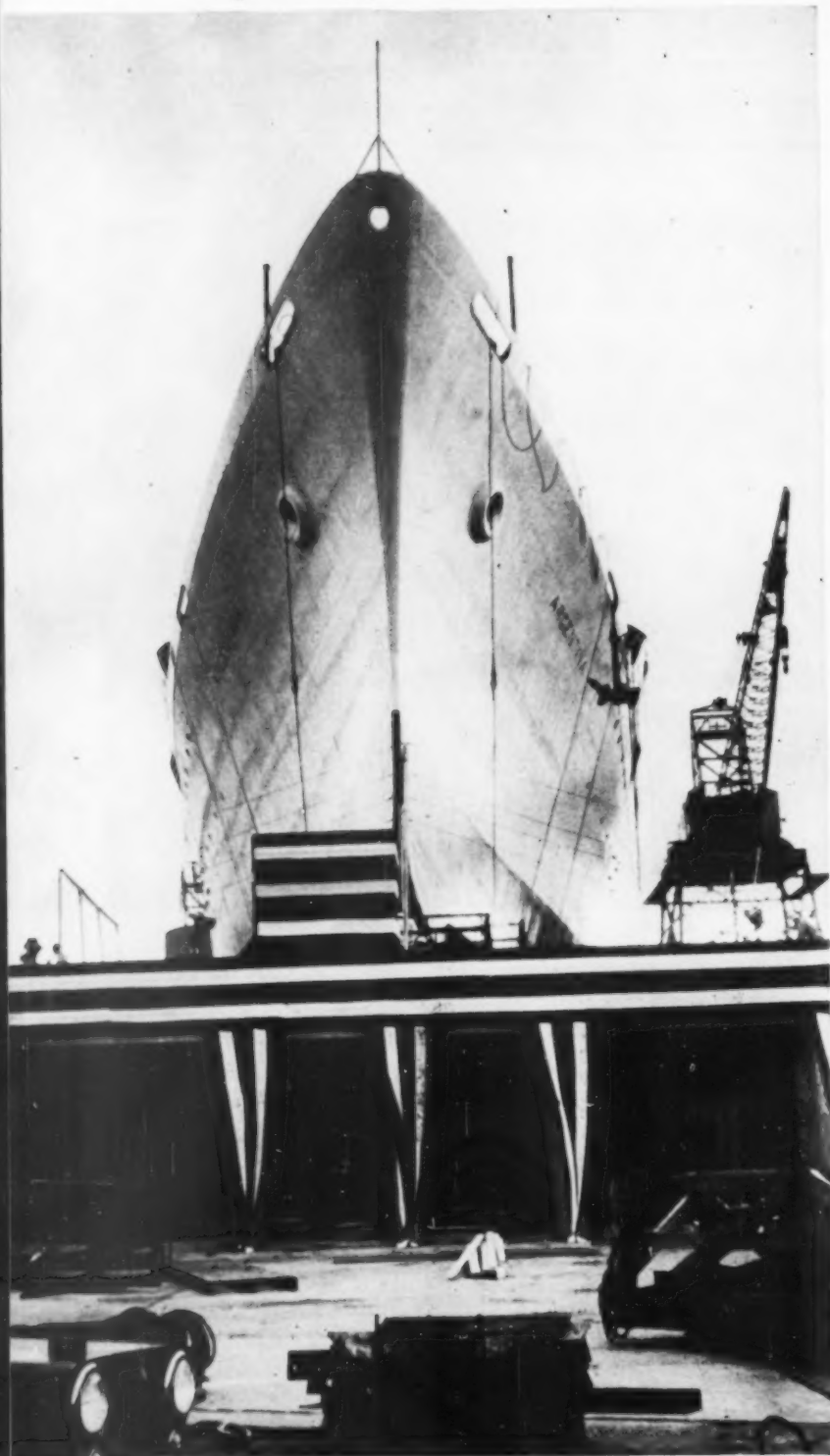
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Shaping U.S. Future on the Sea



SOUTH AMERICA LINER, the Argentina—one of Moore-McCormack's two new 550-passenger luxury ships—is readied for launching and final outfitting.

Big splurge of new luxury liners and massive cargo ship replacement program look beyond current shipping slump to win slice of coming trade growth, keep U.S. shipyards humming.

Five swift new liners (three of them shown in these pictures) will join the U.S. passenger fleet this summer—more than have gone into service at one time in several decades.

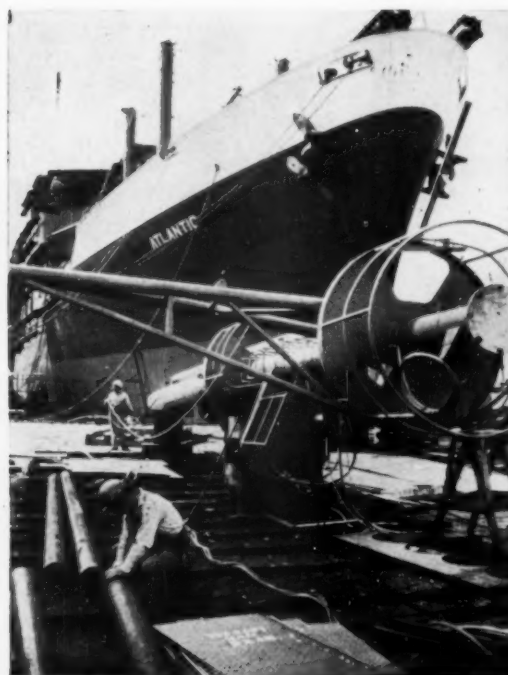
But that's just a preview of the transformation that's coming over the U.S. passenger and merchant fleet in the next two decades as more big liners come off the ways, as the government-backed \$3-billion replacement program modernizes the cargo fleets, and as atom power starts to get into the picture. For the short term, shipping's problem is finding more business to pull it out of its current doldrums—but the new ships are a measure of its long-range confidence (page 122).

For U.S. shipyards, the replacement program, and defense needs, bring a promise of something they have never known—long-term stability to keep them busy year by year, instead of the old boom-and-bust cycle (page 128).

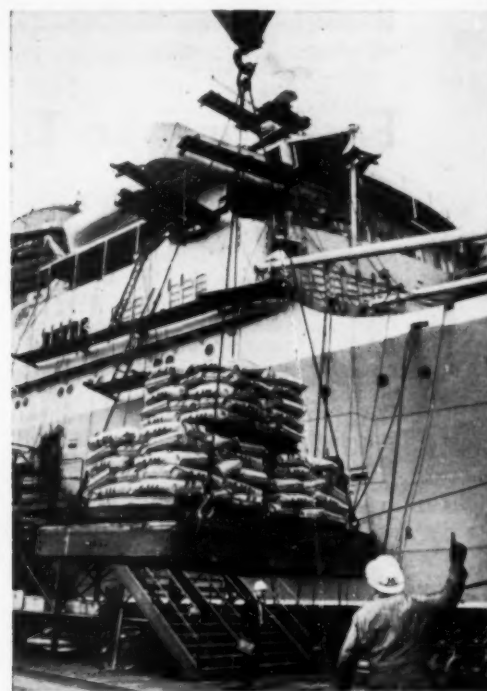




BUSY SHIPYARD workers prepare shipbuilding plate for transfer to assembly areas alongside the building ways.

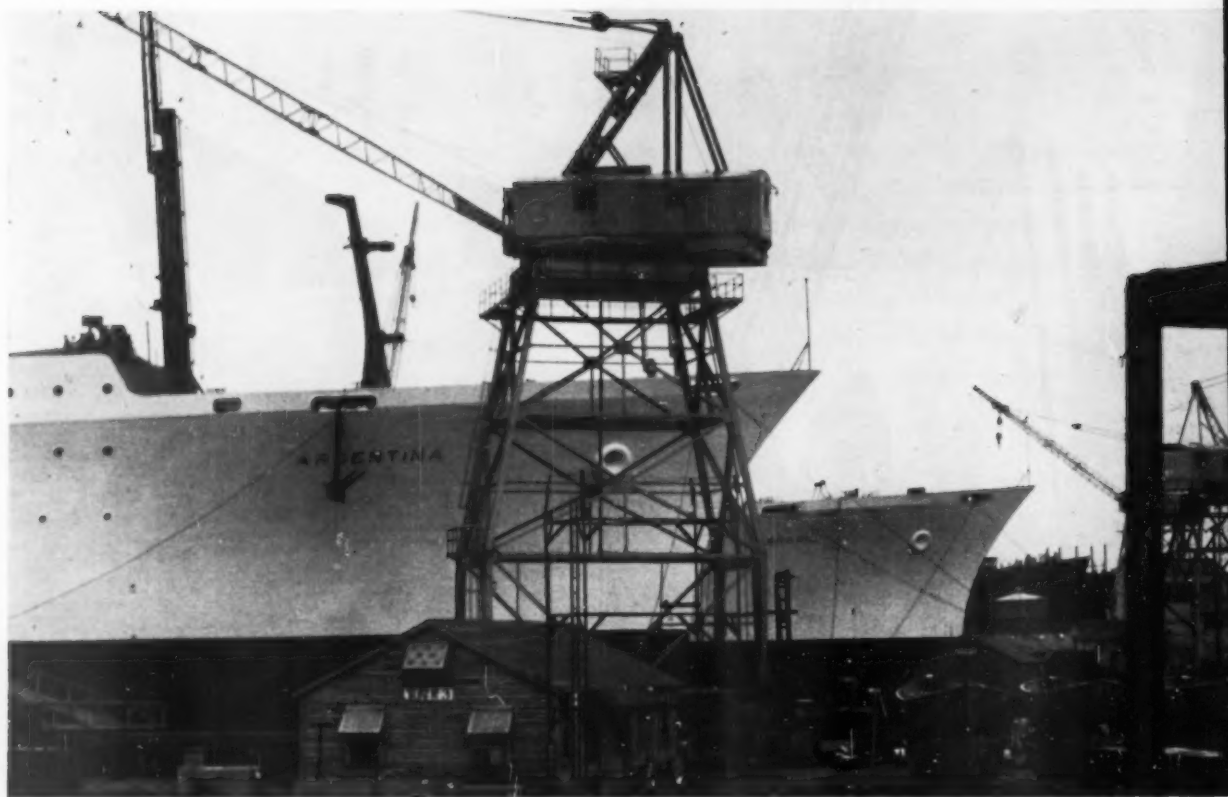


TOURIST-CLASS LINER for American Banner Line, the Atlantic, awaits hoisting of crow's nest into position.



CRUISE LINER for Grace Line, the Santa Rosa, gets materials needed for interior decorating at Newport News yard.

FIRST SHIFT at Ingalls' Pascagoula shipyard—cramped with new cargo ships, liners, subs, and tankers—heads for home.



NEW LINERS for Moore-McCormack, clipping seven days off Buenos Aires round trip, are part of large-scale rebuilding of U. S. fleets.

Fast Ships to Turn the Shipping Tide

This summer five sleek new ocean passenger liners, including the two above, will join the parade of swift and glamorous luxury ships now carrying vacation-bent tourists to European, Caribbean, and Latin American ports. It's the greatest number of new passenger ships to join the American flag merchant fleet at one time in several decades.

And these are but a foretaste. Shipping buffs are well aware that at least two new superliners comparable in speed and size to the liner *United States* are planned—that the keel of the first nuclear-powered cargo-passenger ship is scheduled to be laid May 22—that, in fact, a good share of the 300 ships of the government-backed merchant fleet are due for replacement over the next 10 to 15 years at a cost of about \$3-billion.

• **Splurge**—The first of the new passenger liners to go into service, late in May, will be the American Banner Line's 20-knot Atlantic (picture, page 121). It's the first U.S. ship designed as an essentially all-tourist class vessel, and will carry 860 tourist and 40 first-class passengers between New York and Europe. The other four new ships are cargo liners, basically bigger and faster replace-

ments for existing tonnage—the Grace Line's 300-passenger *Santa Rosa* and *Santa Paula*, and Moore-McCormack Lines' 553-passenger *Argentina* and *Brasil* (above). They will be placed into operation this summer and fall.

As each of these new ships makes its debut in New York harbor, with paint glistening and flags fluttering, it will get the traditional salute of car-splitting whistles, and spouting geysers of water from fireboats. By summer's end, it will be hard to convince anyone but the shipping lines themselves that the U.S. merchant marine hasn't hit a peacetime prosperity unequaled since our fast clipper ships were the rage of the world.

• **Substance**—Certainly, the advent of five new passenger liners in a single season—with more to follow—might be dignified by the term "rebirth," as far as the passenger fleet is concerned. And in terms of the size of its fleets and the promises held out by the current replacement program, this country's merchant marine is healthier than it has been in a long time.

But the sailing isn't all smooth. In 1957, shipping profits were generally good. As things stand this year, however, the new ships bear little resemblance to a shiny symbol of prosperity,

but appear rather as a means of bolstering the industry's sliding fortunes. World shipping, generally, is in one of its periodic slumps (BW—Mar. 29 '58, p30)—and the U.S. shipping industry, in its various segments, mirrors that state.

Fortunately, however, U.S. ships operate generally on the more vital trade routes, and are buttressed by a government operating subsidy. So American lines are by no means in dire distress—though the subsidy-less tramp ship operators are reported in a bad way.

I. New Fleets on the Way

Most U.S. ship operators, though, feel the decline has bottomed out. And, long inured to the cyclic nature of their business, they remain confident for the long run. They see that confidence firmly based on the world's population growth and the insatiable thirst of most of the world's peoples for higher living standards.

The new ships—those that will get their boisterous sendoff this summer, and those that will slide down the ways year after year as the \$3-billion replacement program moves ahead—are the U.S. ship lines' bet to wangle a profit-



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able share of that growth, both in passenger and cargo traffic.

• **Faster, Bigger**—The passenger lines, bucking the lure of the air, turn to speed and comfort as bait. Moore-McCormack's two new 23-knot ships, operating on the run to the east coast of South America, will make Buenos Aires and back in 31 days instead of the present 38. The line hopes to attract substantially more travel than its present 400-passenger ships can carry. Grace Line, too, is optimistic; its new Caribbean cruise ships will carry 300 passengers instead of the present 225.

All of these vessels will be one-class ships, and all will be equipped with either Denny-Brown or Sperry Gyroscope retractable underwater stabilizing fins to reduce roll—a boon to travelers prone to seasickness. They are the first U.S. ships to be built with such equipment. All four ships will cost about \$25-million apiece, with the government's subsidy tab running to about \$10.5-million in each case.

• **In the Offing**—Other new American passenger liners in the offing include two new 1,500-passenger superliners of the United States type—one for U.S. Lines to replace the 17-year-old America, the other for American President Lines. Building of these ships, at a price tag around \$100-million each, depends on Congressional appropriations—with chances reported good.

American Export Lines is looking into the possibilities of building a third liner to add to its Constitution and Independence—and in any case, plans to expand the capacity of these two.

• **Work Horses**—Passenger ships supply most of the glamor in any merchant fleet. But the more substantial part of any merchant marine, not counting tankers, consists of general purpose cargo ships plying the so-called liner trades, on an approximate schedule of regular sailings on specific routes.

So far, under the much ballyhooed \$3-billion ship replacement program for American shipping, 15 cargo ships have been ordered. These include: for Lykes Bros. Steamship Co., five 17½-knot ships costing a total of \$48-million; for American Export, four 18½-knot ships, \$46-million; for Moore-McCormack, four 18-knot ships, \$45-million; and for American President, two slightly larger 18-knot ships, \$29-million. Except for these last two, the ships are about the same size as those they will replace—but from two to four knots faster.

• **Only a Starter**—These 15 ships, due to come off the ways in the next few years, are only the beginning of the massive replacement program, designed to substitute faster, more modern vessels for the aging war-built ships of the U.S. merchant marine. In this replacement plan, the government's subsidy program plays a vital part—in fact, it's

New Fleets Planned By U. S. Shipping Lines

	Current Fleet		New Ships Planned	New Ships Contracted
	Passenger & Combination Passenger-Cargo Ships	Cargo		
United States Lines	2	54	1 Superliner	
American President Lines	5	16	32	2
(American Mail Line)		9	1 Superliner	
Matson Navigation Co.	4	24	4	
(Oceanic Steamship Co.)				
Lykes Bros. Steamship Co.		54	53	5
Moore-McCormack Lines	2	43	45	4
American Export Lines	6	24	28	4
Grace Line	11	16	26	
Waterman Steamship Corp.		40		
(Pan Atlantic Steamship Corp.)				
Pacific Far East Line		11		
Farrell Lines	2	14	16	
Mississippi Shipping Co.	3	11	14	
(Delta Line)				
States Steamship Co.		13	13	
(Pacific Transport Lines)				
States Marine		39	50	
(Isthmian Steamship Co.)				

Data from other lines not available.

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pretty generally accepted that there wouldn't be any American flag fleet without government aid, which goes back in its present form to the Merchant Marine Act of 1936.

The subsidy program has three main aims: insuring national defense, keeping a private industry in being, and guaranteeing U.S. manufacturers an adequate and reliable means of getting their products to competitive world markets. The subsidies are of two kinds: (1) a differential operating costs, which run anywhere from two to four times as high, and (2) a construction subsidy, about 42% of total cost, to compensate for higher U.S. building costs.

Fourteen American ship lines, operating 305 ships in the regular liner trades, receive operating subsidies. The \$3-billion replacement program applies entirely to the fleets of these 14 subsidized lines—under the terms of their agreement with the U.S. the lines are required to replace their ships before they reach 20 years of age.

• **Step by Step**—As existing vessels reach retirement age, the ship-for-ship replacement program is expected to generate the start of 20 ships a year, at an annual cost of \$220-million. This staggering of the replacements over a period of years is designed primarily to avoid future "block obsolescence."

Tanker fleets, whose prospects are considered pretty good for the long run, are not included in the program. Because of government provi-

sions that allow U.S. tanker operators to transfer older tankers to the more lucrative foreign flag operations in return for building new U.S. flag tankers, U.S. tankers are already among the world's more modern vessels.

• **Financing Problems**—Though the U.S. construction subsidy is a big help, it doesn't eliminate all financing problems, and ship lines are having to go to the money market, many for the first time, to find cash for building. Lykes Bros., for example, is offering its first public issue of common stock (BW—Apr. 5 '58, p90). Grace and Moore-McCormack are offering bond issues.

II. Out of the Trough

But the immediate problem facing the ship lines is not so much finding cash as finding more cargo, and cutting cargo handling costs to fatten up what profits there are. Shipping lines, as shipping officials put it, reflect everybody's business—and just now everybody's business is not so good.

The cutback in demand for such bulk cargoes as bauxite, ore, coal, and grain has hurt both specialized bulk carriers and tramp operators; and the U.S. business recession is beginning to make itself felt elsewhere. Ship lines feel the drop in U.S. exports, which make up a substantial part of total world trade.

• **Who's Hurt?**—The U.S. flag merchant marine comprises in all about



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930 ships—37 combination passenger-cargo ships, 295 tankers, about 600 freighters.

Worst hit of all in the world slump are the tanker operators, with near 10% of the world tanker fleet laid up and some tanker owners desperately offering their ships at cut-rate prices for the grain trade.

• **Passengers**—Paradoxically, passenger operations are least hurt by the recession. The U.S. Lines, operating the America and the United States, reports passenger bookings up from last year. American Export Lines expects a better season than last year on its Mediterranean route—though its combination ships, the Four Aces, largely cargo but carrying 112 passengers, are not sharing in this trend.

Pacific passenger business is a bit more spotty. American President Lines reports its round-the-world and trans-pacific runs are "fairly firm." But Matson Navigation Co. is having trouble with both its Hawaiian and South Pacific runs—though these troubles stem more from rapid expansion of its operations in the last year than from the business slump. The South Pacific and Australia service of its wholly owned subsidiary, Oceanic Steamship Co. reactivated last year, faces competition from Britain's Peninsular & Oriental line (BW—Mar. 1 '58, p. 70).

• **Cargo**—On the cargo side of the picture, the 14 U.S. subsidized lines aren't in too bad shape. Most pessimistic is James T. Farrell, president of Farrell Lines, who questions whether U.S. manufacturers can win back the export markets they are losing to lower priced German and British goods. American Export Lines, however, expects the slump to be of modest duration.

But the few hardy liner operators who were proud of their unsubsidized status—lines such as Waterman, Isbrandtsen, Isthmian, and States Marine, no longer feel they can go it alone; and just about all of them have subsidy applications pending. (Also operating outside the subsidy blanket are captive fleets of major industrial concerns, such as Aluminum Co. of America's Alcoa Steamship Co., the Panama Line, and the United Fruit Co. fleet.)

The few American survivors in the tramp shipping trade see a shaky future ahead under present conditions, according to the American Tramp Shipowners Assn. These lines, currently operating about 65 ships, depend almost entirely on foreign aid cargoes—and in the present slump, tanker and liner operators are also seeking these cargoes to take up the slack. The answer of the tramp operators is to demand a subsidy, too.

Coastwise, intercoastal, and Alaskan shipping presents a varied picture. General cargo shipments along the Atlantic

America's transportation system is at a critical crossroads

The full potential of the national transportation system cannot be fully achieved until all carriers—highway, rail, water and air—use their facilities and provide services to the shipping public as though there were a *single* transportation system. Ryder System maintains that the only durable solution lies in greater coordination of service *within* the industry.

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- (1) pioneering rail-trailer "piggy-back" service in the South between Jacksonville and Miami,
- (2) interchanging freight with various airlines at several points in our system, and
- (3) conducting pilot experimental land-sea operations.

There are some who advocate rate increases as an answer. Others hope for higher government subsidies. Actually, our problems can and should be solved without any more governmental regulation than is necessary in the public interest.

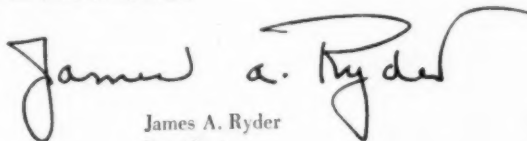
We believe in healthy competition. We believe each segment of the industry should develop its most profitable potentials. However, rather than work towards a coor-

dated, cooperative transportation plan, some segments of the industry sometimes have allowed competition to degenerate into bitter, fruitless quarreling.

And while this feuding goes on, more and more freight moves by private and unregulated carriage . . . endangering the health of our public transportation system.

Now, more than ever, when the country needs a strong transportation system, the industry should bury the hatchet and work together to provide the American shipper with the kind of service to which he is entitled. Coordination—of facilities, rates, and services—is the only way. After a period of successful coordination of services, and with proper safeguards of the public interest, common ownership can follow. And we believe that the regulatory statutes can and should be amended to permit and encourage this development.

Ryder System is convinced that it is along that road that the solutions to most of our problems will be found, and we invite the entire transportation industry to join with us in this endeavor.


James A. Ryder
President

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Coast to the Gulf have long since been dead, except for the highly successful boxcar-carrying operation of Seatrain Lines, and Pan-Atlantic Steamship Corp.'s container ship venture. Some bulk carriers and specialized ships are also taking the slump in stride. Alaskan shipping is generally hard hit by cut-backs in military shipments.

III. Ships of the Future

Beyond the problems of the present shipping slump, shipowners see somewhere off in the distance the disturbing challenge of atomic power—but it's still off in the distance. The ships that come off the ways in the next five years or so—though they will incorporate the latest improvements in cargo handling, such as quick-opening hatches, heavier

lift-booms, and many cargo stowage refinements—will look very much like the ships we see today.

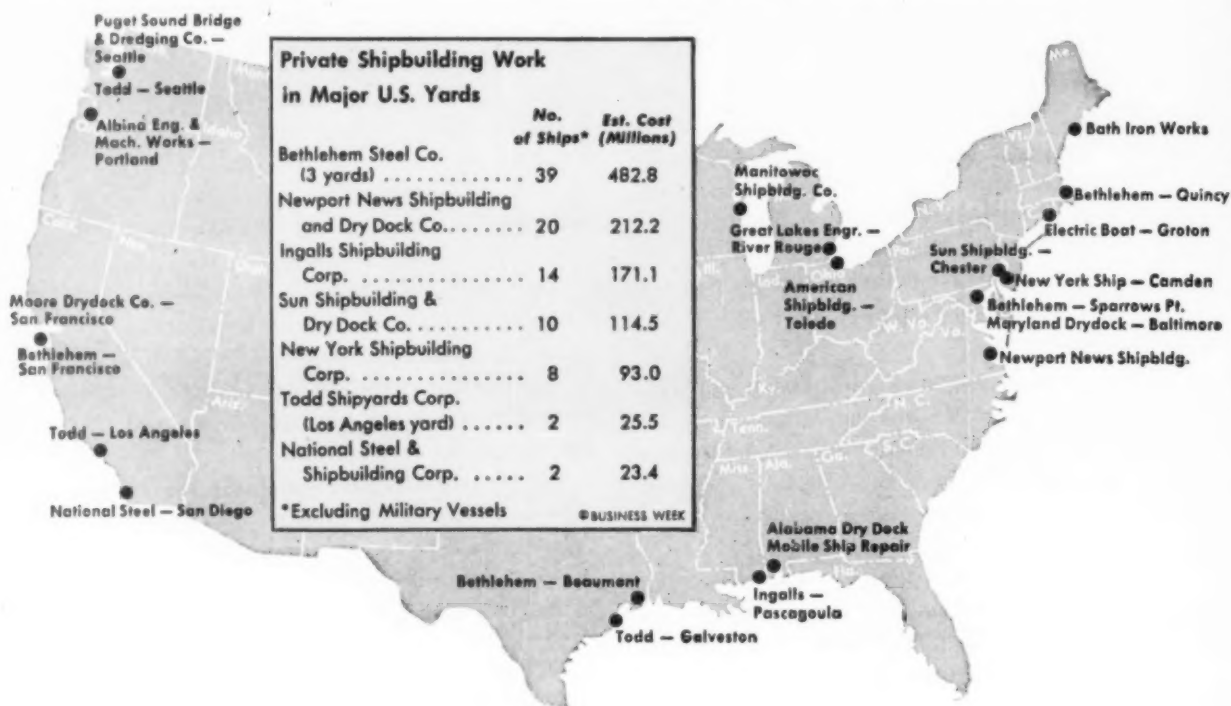
Beyond that period, there will be an increasing trend to specialized ships, such as the orange juicers and wine ships of today. More roll-on trailerships may start to appear on the shorter runs, and container-type ships on the longer runs—though the consensus of deep-water ship operators is that such ships are not suitable for transoceanic runs.

Five years from now you may be seeing some atomic-powered supertankers and bulk carriers plying the oceans—or even some nuclear-powered passenger ships—though most shipping men see atomic power for merchant ships on any scale 10 years or more away. They agree that the atom's first chance will come in oil or ore carriers whose owners

are willing to pay a premium for a quick turnaround.

The Maritime Administration is looking even further ahead with three feasibility studies now under way. Grumman Aircraft Engineering Corp. is studying the possibilities of 300-passenger vessels of a new type capable of skimming over the waves at 100 mph; Aerojet-General Corp. is looking into big, nuclear-powered cargo-handling submarines; and General Dynamics has a study under way on nuclear-powered tanker subs.

But it will be a long time before U. S. shipyards get contracts for any such radically new craft; and in fact, they will be kept busy for some time to come keeping up with the demand for today's conventional ships. The story of the shipyards' outlook follows.



A Busy Life Ahead for U. S. Shipyards

U. S. shipyards today have the healthiest long-range outlook they have ever had in their peacetime history—paradoxically at a time when such low-cost shipbuilders as the Japanese are viewing their rapidly emptying building ways with alarm. The difference is the government-backed \$3-billion long-range replacement program of the major U. S. shipping lines (page 122).

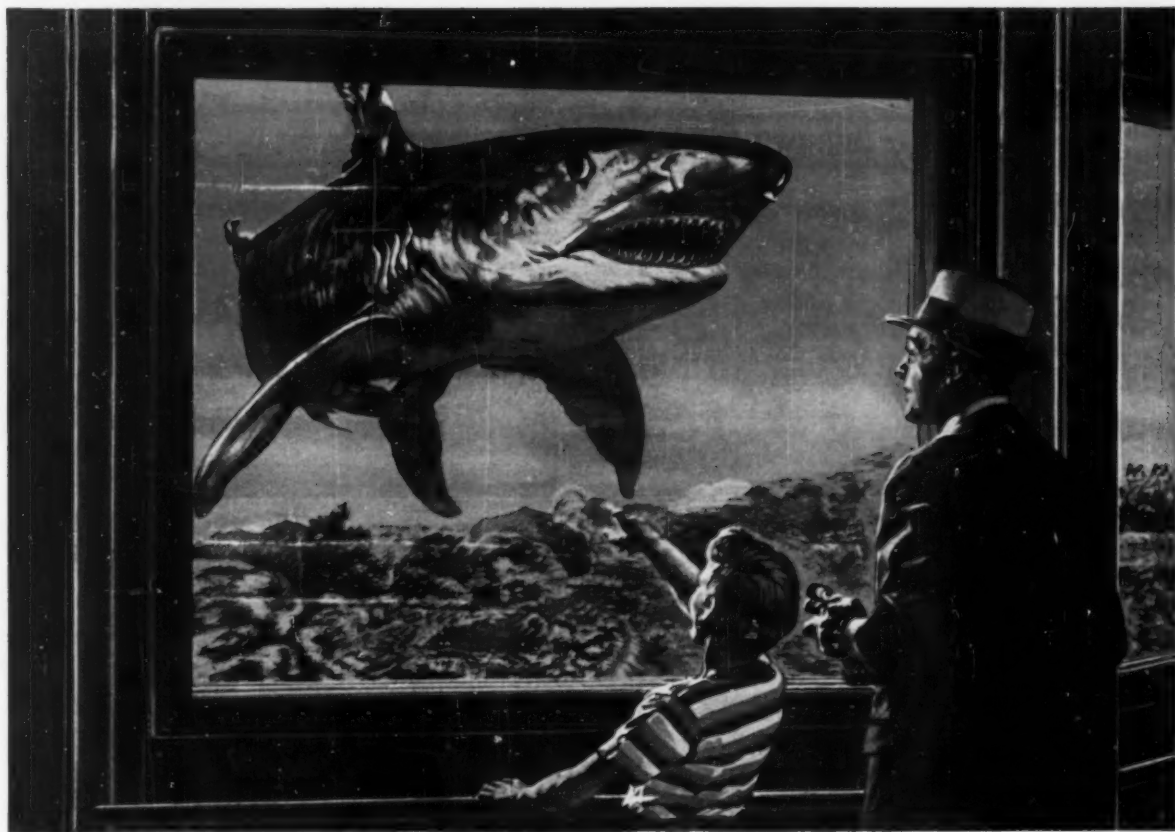
This program will take hold just in time. U. S. shipyard building ways are now generously filled with a Suez-inspired glut of tanker orders. Because most of these tankers are being built

with a view to the long range, only about 13 orders have been canceled, despite the present depressed state of the world tanker market. But this backlog of some 70 tankers valued at \$700-million will be just about completely whittled away by 1960. That would leave the shipyards facing a rather bleak 1961.

Instead, thanks to the fleet-size cargo ship replacement program, the next 10 to 15 years isn't going to be too bad. The spread-out nature of the program, which calls for the building of about 20 cargo vessels a year at an annual cost of about \$220-million, will do much to

give the traditionally boom-and-bust U. S. shipbuilding industry the stability it has lacked up to this time.

• **Ups and Downs**—A slight backward look indicates just how spotty the shipbuilders' lot can be. In April of 1955, for example, U. S. yards had a total of 15 ships on order; today the order books list a backlog of 102 ships having a total value of over \$1-billion. Without the fleet replacement program, the contracts would again be thinning out next year, so that by 1960 the books would show contracts for only 30 vessels—and even these would include 14



The strange case of the shark's teeth ...and some important facts about yours

Had Mother Nature made the same provisions for our teeth as she did for the shark's, good dental health would be no problem at all.

For when a shark loses a tooth, a new one soon grows in its place. Once we lose a tooth, however, it is gone for good.

Yet, the second set of teeth which Mother Nature gives us is strong and durable enough to last a lifetime... if given proper care. Unfortunately, too few of us give our teeth the care they need.

Proof of our neglect comes from studies made by the American Dental Association. It reports that only 40 percent of all Ameri-

cans get reasonably adequate and regular dental care.

The rest get emergency care or none. Moreover, one out of 7 adults has never been to a dentist.

There is more to be gained from regular dental care than simply keeping the teeth clean, bright and healthy. For when decay strikes, when gums become diseased, when abscesses form at the roots of teeth... a center of infection is established. From this site of infection, germs may enter the blood stream and cause disease in other parts of the body.

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can pave the way for infection in the interior of a tooth. The dentist can usually detect such trouble by X-ray examination and check it before serious damage occurs.

Healthy teeth... for children as well as adults... depend upon three things:

1. *Diet*—which should supply all the elements for good teeth, especially calcium and vitamins C and D.
2. *Cleanliness*—or proper brushing, which should be done after meals and always before retiring.
3. *Check-ups*—which should be made every six months or as often as your dentist recommends.

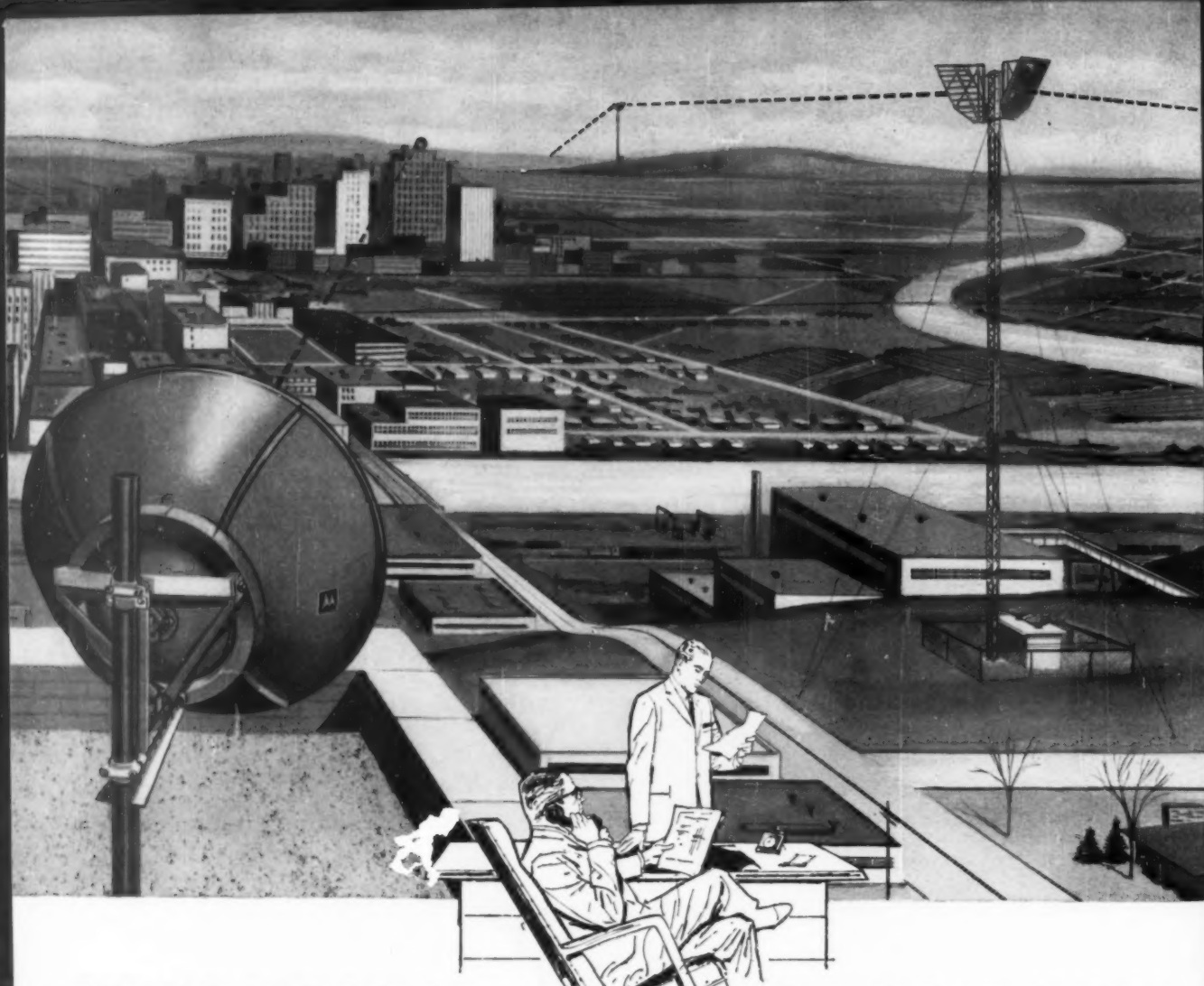
If you see your dentist regularly, he will get to know your individual dental requirements and how they can be met to your best advantage. If you cooperate with him, your chances will be far better to keep most of your teeth most of your life.

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"... one intriguing possibility is that U.S. shipbuilding yards, because of their commanding head start in nuclear work, might again be able to carve out a role in world shipbuilding ..."

STORY starts on p. 128

out of the first batch of cargo ships under the program.

This government-backed boost in the nick of time is nothing new for U.S. shipbuilders. The industry has always been dependent upon the various arms of the U.S. government for whatever stability it had. Shipbuilding, except in time of war, is basically a job-shop type of operation not lending itself to mass production techniques. And because there isn't the volume that would allow U.S. shipbuilders to offset their higher wage costs with a higher degree of mechanization, U.S. building costs run anywhere from a third to two thirds higher than competitive foreign yards.

Nevertheless, U.S. yards have always managed to get a fair share of tanker orders during the periodic postwar tanker-building booms. This is because U.S. yards have made a virtue of being able to turn around fast and build and deliver a ship in the matter of months, while the lower-cost European and Japanese yards are so swamped they cannot promise delivery for years ahead. But this is not the kind of business to build a stable industry on.

• **Hot Competition**—That's why the promise of greater stability in a 20-ship-a-year replacement program over a 10- to 15-year period is alluring.

But, paradoxically, the program is also going to shake up the shipbuilding industry a bit. Bidding on the contracts, already rough, is probably going to get rougher. Twenty ships a year, parceled out just among the seven major shipbuilding yards, with a total of 48 building ways, wouldn't guarantee unequaled prosperity for all—not to speak of the smaller yards and those that normally stick to ship repair work. These will also be trying to bid themselves in.

The first batch of replacement orders—involving some 15 ships at a total cost of \$170-million—has already attracted two newcomers to the large shipbuilding ranks. San Diego's National Steel & Shipbuilding Corp. will build two \$11.8-million American Export Lines ships. Todd Shipyards Corp.'s Los Angeles yard, normally more of a ship repair yard, will build two \$11-million Moore-McCormack vessels.

West Coast yards, in fact, account for six of the 15 ships; Bethlehem Steel's San Francisco yard has a \$29-million contract for two high-speed cargo vessels for American President

Lines. These contracts were awarded largely on the basis of aiding economically depressed areas.

The remaining contracts are held by Ingalls Shipbuilding Corp., Pascagoula, Miss. (five ships); New York Shipbuilding Corp., Camden, N.J. (two ships); and Sun Shipbuilding & Dry Dock Corp., Chester, Pa. (two ships). Ingalls is also currently readying Moore-McCormack's two fast new passenger liners (page 122) for the sea.

An indication of how competitive the bidding was on the cargo ship replacements is the fact that Newport News Shipbuilding & Dry Dock Co., one of the country's largest yards, was out of the running. The yard says these jobs were awarded at a lower price than it felt it had to go at this time. (Newport News is currently finishing off Grace Line's two new liners.)

The replacements, of course, are being built under the government subsidy program (page 125), with the U.S. putting up about 42% of the tab.

• **Best Friend**—Defense readiness plays a key role in the subsidy program—a substantial and modern shipbuilding industry is of vital importance to the Navy. In fact, as the Newport News Shipbuilding people will tell you, the Navy has really been the shipbuilder's best friend, from the point of view both of number and continuity of orders.

Naval work now under contract to private shipbuilding firms includes one large nuclear-powered aircraft carrier that will dwarf even the Forrestal class of supercarriers; one oil-fired carrier, one nuclear-powered guided missile cruiser, five large destroyers, 20 destroyers and destroyer escorts, 10 submarines, and five LSTs.

The contracts are well distributed. Building or on order are: Newport News, the nuclear aircraft carrier and an atom-powered submarine; New York Ship, the conventional carrier, three guided missile destroyers, and a sub; Ingalls, three subs, one of them nuclear-powered. Todd's Seattle yard has a brace of guided missile destroyers; Puget Sound Bridge & Dredging Co. another two destroyers. Bethlehem Steel's Quincy yard is rushing through the Navy's first nuclear warship, the cruiser Long Beach, and its San Francisco yard is rebuilding an existing cruiser for the missile age. Defoe Shipbuilding Co., Bay City, Mich., has four guided missile destroyers, and

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**" . . . last year's revenues
and profits, though not at
a postwar high, showed considerable improvement . . ."**

STORY starts on p. 128

American Ship Building Co., Cleveland, two destroyer escorts and two LSTs.

Besides all this, the Navy just about single-handedly supports two yards specializing in Navy work—the destroyer-building Bath Iron Works and General Dynamics' submarine-building Electric Boat Div.

The Navy's nuclear trend leads to some interesting surmises on the role of nuclear power in the long-range prospects of the U.S. shipbuilding industry. One intriguing possibility is that the U.S. yards, because of their head start in nuclear work, might again be able to carve out a role in world shipbuilding.

• **Rescuer**—Sometimes it's the Maritime Administration that comes to the rescue of the shipyards. In the doldrums of 1951-52, only the Maritime Administration's orders for 35 high-speed cargo ships kept most of the yards alive. These ships, scorned at the time as too fast to be commercially economical, now are the rage of the transpacific trade.

Currently, the agency's most headlined project is the world's first nuclear-powered merchant ship, the keel for which will be laid next month by New York Ship.

It's also thinking of changing over to nuclear power one of the tankers Ingalls is building for it—and the more advanced plant contemplated for this ship is expected to create a considerable engineering stir.

• **Modernizing**—All these programs, plus the successive tanker booms, have put U.S. shipbuilding in pretty good financial shape. Last year's revenues and profits, though not at a postwar high, showed considerable improvement over the preceding several years. The financial cushion has made possible fairly extensive modernization programs in the past few years, so the shipyards' physical plants are ready for what's ahead.

Bethlehem Steel's major plants have been getting a face-lifting: a \$14-million three-ship building basin and expanded ground assembly area at Quincy; an extension of the Sparrows Point ways to handle 46,000 dwt. tankers; a new pier and heavier-lift tower cranes at San Francisco. Sun Shipbuilding is completing a \$4.5-million expansion, its biggest ever in peacetime, that will enable it to handle 85,000 dwt. tankers. Newport News, Ingalls, and New York

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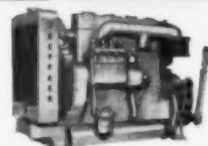
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"... San Diego's National Steel & Shipbuilding thinks it can compete by specializing in one size of ship..."

STORY starts on p. 128

Ship also have expansions under way or completed.

New fabricating techniques are also coming in. Most startling is the optical layout, which promises to do away with the need for laying out the ship full size in the mold loft in order to construct the templates needed for cutting and shaping the plating. Now, by means of an optical projection system and specially prepared photographic negatives of ship drawings, the outline can be projected right onto the plate for tracing. Sun Shipbuilding has even imported four special plate-cutting machines from Germany; these are guided photoelectrically by the layout beams so as to do the cutting job automatically.

• **Regional Shifts**—The building trends over the past few years have also brought some regional shifts in the shipbuilding industry—notably the rise of the Gulf Coast yards. Ingalls, which has become the country's third or fourth largest shipbuilder, is still the only major yard in the area. But the offshore oil industry has given a boost to a group of medium-sized yards (BW—Nov.19'55,p88). These yards have fair-sized building ways, and can be expected to take an occasional flyer at something bigger—as did Avondale Marine Ways in taking a \$10-million Army dredge away from East Coast yards.

West Coast yards are hampered by higher wage costs and higher shipping costs of steel, machinery, and equipment, and consequently have been unable to match East Coast and Gulf yards on cost. San Diego's National Steel & Shipbuilding thinks it can compete by specializing on one size of ship, and Todd is optimistic about its West Coast costs; but Bethlehem does not think the West Coast will ever really be in the running.

Another shipbuilding force still to be reckoned with is in the Great Lakes shipyards. Except in wartime, these have pretty much kept to their own specialized ore carriers, but with the opening of the Seaway there would be nothing to stop them from going in for oceangoing vessels. The consensus is, however, that the effect of the Seaway on shipping, ship design and shipbuilding (BW—Sep.7'57,p194) will not be felt for some years. Besides Navy ships, Great Lakes yards are still concentrating on Upper Lake ore carriers, with six presently under construction at three yards. **END**



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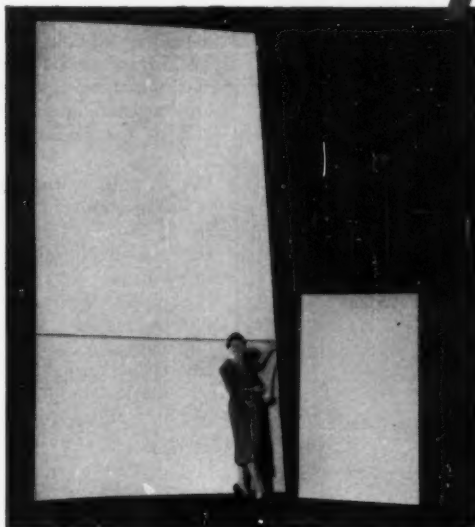
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It is very difficult to roll thin Stainless Steel sheets to extreme widths, but aircraft manufacturers needed them, so United States Steel found a way to do the job. Standard-size sheets of Stainless Steel are covered with heavy carbon steel plates, and the carbon plates are welded shut at the edges. The sandwich is then heated and rolled. Stainless Steel sheets as wide as 120 inches can be produced to exceedingly close tolerances with U.S. Steel's versatile facilities through this ingenious method.



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136 *Production*

PRODUCTION BRIEFS

Continuous regeneration of copper etching solutions is possible with a technique developed by Drs. Paul D. Garn and Louis H. Sharpe of Bell Telephone Laboratories. They say it will eliminate downtime of equipment used to make printed circuits and make it possible to salvage the etched copper. Etching solutions of cupric chloride in the presence of excess chloride ions are regenerated electrolytically while etching operations continue.

Wood pulp is turned into pellets for bulk shipment in a system developed by Sprout, Waldron & Co., Muncy, Pa. Conventional methods involve sheetforming or pressing, and baling the pulp. Sprout-Waldron says the system reduces shipping volume by one-third and completely eliminates baling operations; it also makes possible pneumatic handling, which reduces labor and other operating costs.

High-pressure vulcanizing makes leather shoes nearly waterproof in a process developed by C. & J. Clark, Ltd., Somerset, England. Rubber and composition shoe soles are heat-molded to leather uppers without seams or stitches. The uppers are treated with Dow Corning silicones and with other water-resistant chemicals, made by du Pont. First big application probably will be industrial work shoes.

Aluminum oil cans got another boost when Esso Standard Oil ordered up to 25-million for its Baltimore refinery. National Can Corp. will make them for Reynolds Metals Co. using Reynolds aluminum. Other can companies began supplying cans of Reynolds aluminum to Esso last September (BW—Sep. 28 '57, p124), in the first major order for aluminum containers.

Tougher Polyethylene

High-density polyethylene can be made with a new catalyst announced last week by Bakelite Co., a division of Union Carbide Corp. The process, still in the research stages, depends on a combination of tetraphenyl tin and aluminum bromide. Key ingredient is vanadium bromide. This is normally considered an impurity and is found mixed in minute proportions with the other chemicals in the catalyst. Polyethylene produced by the new process is tougher and has a lower brittle temperature than ordinary.

Bakelite now has in operation two plants producing high-density polyethylene by conventional processes (BW—Feb. 23 '57, p94), with a total annual capacity of 55-million lb. **END**

BUSINESS WEEK • Apr. 26, 1958

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Reflecting gas industry growth, Superior Meter Company has recently opened a second plant equipped with the most modern machines and techniques. The staff has been enlarged, too, by the appointment of highly respected meter design and quality control engineers. Superior, now a subsidiary of Neptune Meter Company, continues to keep pace with the leaders of the gas industry whom it has served since 1912.

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Electronic Signal Co., Inc.	toll collection equipment, electronic scales

NEW PRODUCTS



Moving Earth Again

New earth-moving machines will go into production next month when R. G. LeTourneau, Inc., returns to the industry after a five-year absence. In 1953, the Longview (Tex.) company sold its earth-moving business to Westinghouse Air Brake Co. for \$31-million, with a proviso that it stay out of the field until May 1, 1958 (BW-May16'53,p182). It then moved into the land-clearing field.

The new earth movers will be powered by giant "electric wheels" (picture, with Pres. Robert G. LeTourneau), which were first developed in 1951 and perfected during the five-year interval. The "electric wheel" system is an arrangement of high-torque electric motors spotted over every machine, geared directly to the inside of each wheel and all other points where power is needed. All LeTourneau's present machines use the system, which cost close to \$15-million to develop.

Pres. LeTourneau says requests that have come in so far for new earth-movers have been mostly for high-capacity scrapers with all-wheel drive, and heavy-duty dumps for mining.

NEW PRODUCTS BRIEFS

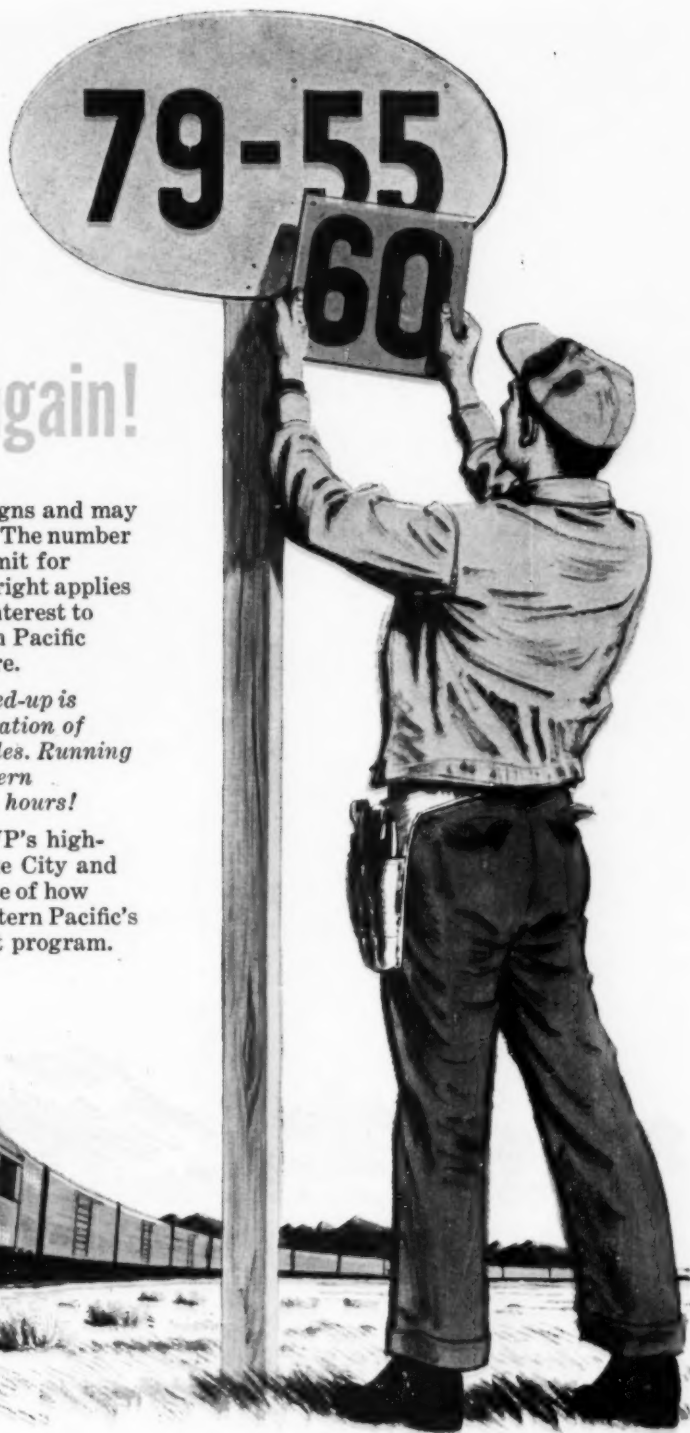
A new tug for towing jet aircraft on the ground makes the jet plane provide its own traction. The plane's weight rides on its landing gear (BW-Nov. 30'57,p96), while motive force is transmitted through a roller-to-tire friction drive at the rear of the tug. The tug

Up goes the speed limit again!

Chances are you've seen these signs and may have wondered what they meant. The number on the left refers to the speed limit for passenger trains; the one on the right applies to freight trains. Of particular interest to shippers are the changes Western Pacific is making in the right-hand figure.

A very tangible result of this speed-up is Western Pacific's recent inauguration of faster westbound freight schedules. Running time between Chicago and Northern California has been cut a full 24 hours!

Faster freight schedules over WP's high-speed roadbed between Salt Lake City and the West Coast are a good example of how shippers are benefiting from Western Pacific's multimillion dollar improvement program.



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weighs 8,000 lb., against 40,000 for a standard airport tractor; it is powered by two Boeing turbine engines, one for driving and one for providing the air to start the jet engines. Manufacturer: Napco Industries, Inc., Minneapolis. Cost will depend on quantity ordered by Air Force.

Tents with no interior poles, designed in a batwing shape, take advantage of an architecturally popular geometrical form—hyperbolic paraboloids (BW—Apr. 13 '57, p134). The tents' vertical walls provide full headroom throughout their area. A tent goes up with four poles and four staked lines. Manufacturer: Hoosier Tarpaulin & Canvas Goods Co., 1302 W. Washington St., Indianapolis. Cost: \$60 for an 11-sq.-ft. version.

A Fiberglass boat that folds up to become its own automobile trailer comes in two hull sections hinged together. Each can be detached and used as a separate boat. When foiled, the two units form a 77-in. trailer, which can be used for camping or utility purposes. A single wheel and spring mounting is attached for trailer use. Manufacturer: Aqua Trailers, Inc., 1039 N. Division, Spokane. Cost: \$795.

A black-and-white television camera in which some vacuum tubes have been replaced by transistors has been announced by General Electric. The new camera eliminates high-pitched voice or sound waves sometimes seen as wavy lines on home TV screens. These lines are caused by vibrations in vacuum tubes. Cost is \$16,000 for camera, viewfinder, control console, and related equipment.

A silicon carbide rectifier can change alternating to direct current at temperatures above the melting point of metals like magnesium and aluminum. It can operate up to 1300F. Its developer, Westinghouse Electric Corp., says no other semiconductor device can function in that temperature range. This advantage may compensate for the fact that silicon carbide is not considered as efficient for rectifiers as silicon or germanium.

Solar heat is good for picnic broilers as well as houses (BW—Apr. 19 '58, p70). One called the Umbroiler folds up like an umbrella. Unfolded, it becomes a parabolic sun-mirror that concentrates the sun's heat at the end of the "handle," to which a small grill is attached for cooking. The mirror is made of aluminized Mylar, and the outside covering is a tartan plaid rayon that doesn't show dirt easily. Manufacturer: Umbroiler Co., 510 Farmers Union Bldg., Denver 2. Cost: \$29.95.

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INTERNATIONAL OUTLOOK

BUSINESS WEEK

APR. 26, 1958



Chances for a summit meeting now seem to be fading. That's the consensus in Washington and London this week, and at the U. N., too.

U. S. officials are struck by the new, tough tone in Soviet policy—a tone that hardly fits “peaceful coexistence.” The Russians last week:

- Made hysterical charges against U. S. H-bomb flights over the Arctic, though they failed at the U. N. to brand the U. S. a warmaker.
- Refused to discuss a summit meeting in joint sessions with the U. S., British, and French ambassadors.
- Started a row with Yugoslavia's Tito—one that might possibly lead to a break as serious as Stalin's back in 1948.

As Washington sees it, Moscow's tough terms have shifted the odds against a summit meeting.

The Soviets are standing pat on conditions the West already has rejected. They are (1) insisting on broadening the summit participants to include Soviet satellites and neutrals; and (2) trying to bypass any serious preliminary talks by the foreign ministers.

Summit preparations could founder just over Moscow's demand that if Britain and France are to go to the summit, then two Soviet satellites must be there also. London and Paris are resisting any idea of being equated with, say, Poland and Czechoslovakia. One way out would be to hold a Big Two summit meeting. But that would be a last resort.

Moscow's attack on our H-bomb flights has not gone well in Washington. It's an obvious attempt to scare world opinion into pressing for an early summit meeting on Russian terms. Such tactics offer little hope for real Soviet concessions, if talks were to be held.

A tougher Soviet line seems to be coming in Eastern Europe. Premier Khrushchev has just snubbed Tito by ordering all Communist parties to boycott this week's Yugoslav Communist Party Congress. Tito is fighting back.

The Khrushchev-Tito fight has been building up for some months. Here's the story: Starting in 1955, Khrushchev worked hard for a reconciliation with Tito. By last summer, Belgrade was backing Soviet foreign policy and was even willing to play ball with the countries in the Warsaw Pact. But Khrushchev wanted more than that. He started pushing Tito to get all the way back into the Soviet camp—tying both his military and economic plans to those of the U.S.S.R. and the satellites. Recently, Khrushchev has tried to force Tito to (1) drop the system of workers' councils in industry; and (2) revive the collective farms in Yugoslavia.

Tito is refusing flatly to swallow Khrushchev's latest demands. So real trouble between Belgrade and Moscow seems to be brewing. And that could set up new tensions in Eastern Europe, lead to a harsher Soviet policy in the whole area.

Differences over North Africa could bring a headon clash between Washington and Paris.

There is no sign that France will weaken in its resolve to settle the Algerian issue by force. And that means more trouble between France and Algeria's two neighbors, Tunisia and Morocco, both of which have been promised U. S. support.

INTERNATIONAL OUTLOOK (Continued)

BUSINESS WEEK

APR. 26, 1958

The first clash is likely to come in the U. N. Tunisia's Pres. Bourguiba has agreed (under U. S. pressure) not to take his dispute with France to the Security Council until the French have a chance to form a new government. But he can't wait too long. In any case, Washington is publicly committed to the support of Tunisia's complaints and to the Anglo-American "good offices" formula for direct talks between France and Tunisia. (Last week, the French Assembly rejected this formula in overthrowing the Gaillard government.)

An open diplomatic break between France and the U. S. could bring de Gaulle to power in Paris. Though de Gaulle might be able to get a negotiated settlement in Algeria, he would be a tough partner to handle in NATO.

—•—

Congress and the Administration seem ready to compromise the reciprocal trade fight before the battle is joined.

The House Ways & Means Committee is working this week on a compromise. It is a straight, one-year extension of the existing Reciprocal Trade Agreements Act—with no new tariff-cutting authority and no protectionist amendments. In effect, an agreement has been reached—among liberal traders and protectionists on the Hill and the White House—to shelve the issue until next year. Here's what's behind the compromise:

- Liberal traders in Congress admit they don't have the votes to pass the Administration's trade program—even if it is watered down some. Next year, the free traders argue, the climate will be more favorable for the five-year extension Pres. Eisenhower has requested. There will be no election-year clamor against import competition, the recession will have eased, and the liberal traders may have a comfortable majority in Congress.

- Protectionists, on the other hand, know they would have trouble voting through the amendments they want—transfer of Presidential negotiating powers back to Congress, plus quotas on commodity imports. Even if they succeeded, the President would probably veto the amended bill.

Meanwhile, domestic lead and zinc producers have won their fight at the Tariff Commission for a 50% boost in import duties. But the commission is split on the question of import quotas, which the producers also are asking for.

The commission will send its recommendations to the White House for final action. If the President accepts the tariff boost, U. S. relations with Peru, Mexico, and Canada will suffer. If he rejects the commission's recommendation, and does so before the trade bill reaches a final vote in Congress, he will strengthen the protectionist forces.

—•—

A settlement of the Suez Canal compensation issue seemed possible at midweek. The shareholders were coming around reluctantly to a compensation formula worked out with the aid of the World Bank.

A Suez settlement would clear the way for a shift in Western policy toward Pres. Nasser of the United Arab Republic. It might also lead Nasser to take a more independent attitude during his upcoming visit to Moscow.

If a settlement is signed, Washington probably would be ready to return some \$30-million dollars worth of Egyptian assets frozen when the canal was nationalized. Britain would follow suit, and probably France as well. That would permit the gradual revival of normal trading relations—and perhaps of U. S. aid to Egypt. At best, though, the status of private foreign investment would be compromised.



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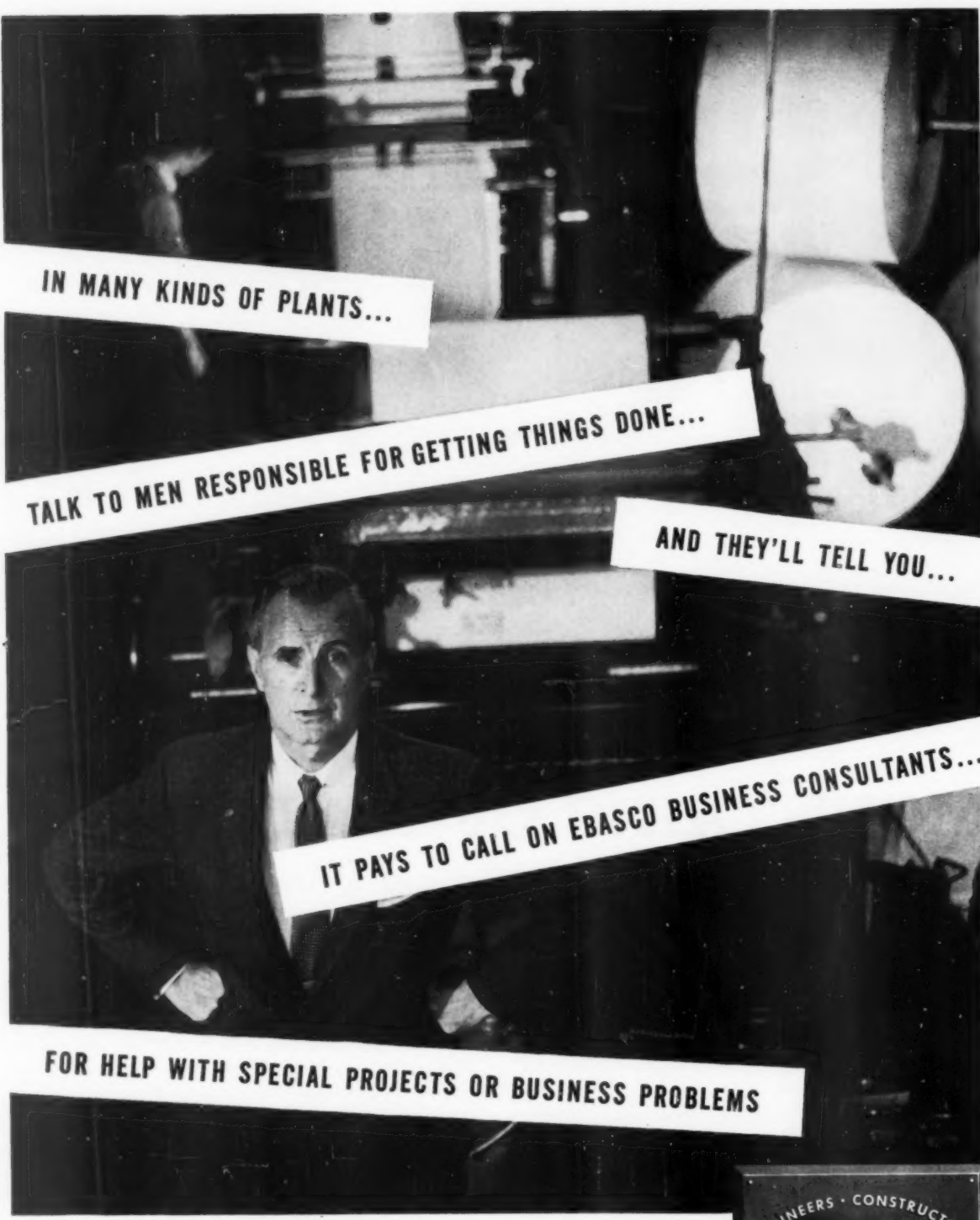
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• • •

Subcommittee Opens New Round of Hearings On Government-Owned Cuban Nickel Plant

Management of the government's \$85-million nickel producing facilities in Cuba is under Congressional fire again. A House government operations subcommittee headed by Rep. Jack Brooks (D-Tex.) began a new round of hearings this week aimed at finding out why General Services Administration has not yet been able to sell its plant at Nicaro, and why the Office of Defense Mobilization awarded Freeport Sulphur Co. an incentive purchase contract to develop new ore producing facilities at nearby Moa Bay.

Officials of the government agencies and the company were called to explain. Freeport's Vice-Pres. J. C. Carrington claimed that both ODM and his company acted in good faith to spur development of new production facilities at a time when most experts saw a need for easing the nickel shortage that existed when the contract was signed in 1956.

The contract has been criticized in Congress since the shortage has eased and economists are now predicting an oversupply by 1965.

Prospective buyers of the Nicaro plant have held back because they feared a decline in the nickel market, and because of the Cuban political troubles.

Brooks' last investigation into Nicaro operations centered around a controversial construction contract award. During the hearings, charges were leveled against alleged Republican political influence, and former GSA Administrator Edmund Mansure resigned after denying the charges.

• • •

ICC Is Accused of Being Too Lax In Regulating Trucking Company Mergers

The Senate Small Business Committee this week asserted that the Interstate Commerce Commission is too lax in regulating mergers in the trucking industry, and attacked former ICC Chmn. Owen Clarke's statement that the trucking industry "needs more concentration."

Committee Chmn. John Sparkman (D-Ala.) in a report says the commission should be more concerned about a situation "in which less than 5% of the carriers do more than 60% of the regulated trucking business." The Sparkman report makes a few general recommendations, but proposes no new legislation.

Republican Sens. Andrew F. Schoepel (Kan.) and Barry Goldwater (Ariz.) called the report a "waste of taxpayers' money" and "a study which proves nothing."

The report released by Sparkman is based on hearings last summer and a special study of ICC actions on trucking mergers, prepared by two Michigan State University economists, Dr. Walter Adams and Dr. James B. Hendry.

The report charges that ICC approves mergers of large carriers more readily than those of small truckers.

The recommendations: The commission should (1) record results of merger applications, evaluate the level of concentration in the trucking industry, and consider the impact of mergers on competition; (2) apply the same standards in considering merger applications from both large and small carriers; and (3) the Justice Dept. should continue to intervene in cases before ICC whenever antitrust issues arise.

• • •

Sun Oil Bids on Military Aviation Fuel But Refuses to Take Imports Pledge

Sun Oil Co.—one of the three oil companies that have declined to go along with the government's voluntary oil imports program—has challenged the authority of military fuel buyers to require compliance with the program.

The government's biggest purchaser of petroleum products, the Military Petroleum Supply Agency, recently asked bids on 18-million bbl. of aviation gasoline, and said that bidders must swear they will abide by the government's imports program during the life of the contract.

Sun offered to sell almost 1-million bbl. to the military agency, but refused to take the pledge. The company said the requirement was "contrary to law and invalid."

The government, handed its first challenge to the new punitive provision of the imports program, will reveal its decision on the Sun offer when awards are made in four to six weeks.

• • •

Meatpackers Beef at Reported Plans To Put Them Under FTC Regulation

The meatpacking industry is up in arms over legislation reported this week by the Senate agriculture and judiciary committees. The bill would change present law to put wholesale and retail operations of meatpackers under concurrent regulation of the Agriculture Dept. and Federal Trade Commission.

Opposed by the American Meat Institute and the Agriculture Dept., the bill proposes a three-year trial period for FTC jurisdiction over packers. Since 1921, packer unfair trade practices have been under the exclusive regulation of Agriculture. Packers have been happy under Agriculture's regulation—or lack of it, as critics charge—and fear FTC may be a lot tougher policeman.

A floor fight in both the Senate and House is expected when the measure comes up for a vote. Different bills on the controversial issue of putting the meat industry under FTC policing have been reported by two House committees. Supporters say, among other things, that trade practice regulation by Agriculture has been practically nonexistent and seek to eliminate a loophole through which retail food chains, by owning a packing plant, are able to escape FTC regulation.

A Bank for Small Business

- Proposed capital bank would have a \$250-million revolving fund to provide long-term equity for small companies.
- The only hitch is how the program should be set up.
- The Administration favors putting it under the wing of the Small Business Administration.
- Opponents want to create an agency to handle the government and private financing involved.

Administration and Congressional leaders have lined up behind the creation of a new agency starkly reminiscent of the Depression-born Reconstruction Finance Corp.—a capital bank with a \$250-million revolving fund to be tapped for loans and purchase of stock of small business enterprises.

As of this week, proponents of the capital bank idea include: William McC. Martin, chairman of the Federal Reserve Board; Sen. Lyndon Johnson, the topmost Democratic strategist in Congress; Speaker Sam Rayburn; and Pres. Eisenhower. So far, this group sees no opponents formidable enough to block quick passage of law.

• **Big Lift**—Some professional small business politicians—Rep. Wright Patman (D-Tex.), for instance—have propagandized for such an agency for years. But about a week or so ago, they got a big lift. The Federal Reserve submitted to Congress an exhaustive study of the problems small businesses have in getting capital. The report said flatly that there just isn't any organized source of long-term equity money for small outfits, and that there should be one. So, with help from the Fed, Majority Leader Johnson and the Senate Banking Committee set about to write legislation that would satisfy Patman and his cohorts while not offending the orthodoxy of the Federal Reserve, nor the philosophy of a Republican Administration.

So the question that Congress is working on now is not whether to do it, but how. The Administration is behind legislation that would give the job to the Small Business Administration. Johnson's bill would create a new agency to administer a program that would involve both government and private financing.

• **Two Schools**—The Senate Banking Committee opened two weeks of hearings this week on the proposals pending before it, and in two days heard two government officials differ on how the program should be set up.

On Monday, Martin said again what

the report said: (1) There is a gap in the existing structure of financing institutions for providing longer-term debt equity capital for small business; (2) there is room for a government program to foster the flow of private investment funds to small business. But Martin doesn't want the job turned over to the Federal Reserve Board. He favors the proposal of the Democratic leadership for the creation of a new agency to administer the program.

On Tuesday, Wendell B. Barnes, administrator of the Small Business Administration, made these points: (1) Small business does not now have ready access to all the long-term credit and equity capital that it may need; (2) his SBA is the logical place to conduct the program, which should be set in motion now.

The Administration proposal calls for an initial appropriation by Congress of \$220-million, while the Johnson bill would empower the Treasury to issue up to \$250-million in bonds. In either approach, the money would be used to set up investment companies or associations in each state, designed to make loans to small business. A limit would be placed on the amount of government investment, to prevent federal control.

• **Whose Baby?**—Barnes argued that his agency is ideally set up to administer such a program, that it now makes short- and intermediate-term loans to small business, and further that such an experimental program should be launched from an existing agency rather than create an elaborate new agency.

Johnson would set up first a small business policy board composed of the Secretary of the Treasury, the Secretary of Commerce, the Small Business Administrator of the Small Business Investment Administration. The group would set loan policy for financial aid by the Small Businesses Administration and the Small Business Investment Administration.

• **The Financial Angles**—The proposed

agency would get a \$250-million revolving fund from the government (1) to buy into small investment companies; (2) to make loans to such companies; and (3) to make loans to state and local development companies.

The Administration proposal also provides for making loans to state development corporations, and the small business investment companies would make low-term loans or buy the debentures of small business loan applicants. These loans could be extended up to 40 years and would bear interest at rates to be determined by the new agency.

• **Federal Aid**—In both approaches, the small business investment companies would receive federal aid in getting started, but in each case would be encouraged to retire federal financing in favor of private funding.

Johnson would have each investment company put up at least \$500,000 of capital, no more than \$250,000 of which could come from the government. Under the Administration bill, the investment association, to be eligible for a federal charter, must have paid-in capital of at least \$100,000 in private funds. It could receive in federal aid up to two times the paid-in capital and surplus of the association.

These proposals provide for the ultimate elimination of federal funds invested in the program. They also provide profit motives to induce private investment in and operation of small business financial institutions. The investment companies will offer sufficient profits to induce private investment in small business. They plan to attract private capital into the program by limiting federal participation to some type of matching basis.

Under both programs, existing state-chartered investment corporations would be eligible to apply for a federal charter, along with newly created groups that conform with eligibility requirements. Administrator Barnes testified that there are some 2,200 state-chartered investment companies now in existence, but said that many of them were one-shot organizations, created to finance one project and no more.

• **Bankers' Views**—The capital bank approach has been opposed by the banking fraternity in the past, but their position is uncertain this year as a result of modification of previous proposals. The American Bankers Assn. is scheduled to testify next week on proposals.

Meanwhile, the House Banking Committee is considering several capital type bills during the course of its hearing on anti-recession measures. Chances are that it will act favorably on some type of capital bank approach at the conclusion of its present hearings early in May. **END**

RESEARCH

Congress Eyes Food Chemicals

The three guinea pigs in the drawing at right—two of them animal and the third human—are undergoing tests to prove whether it's safe to add a new chemical to food for human consumption.

Congress now is debating making tests of this sort mandatory for all chemical food additives. At the moment, most additives are run through these three basic kinds of tests, to be sure—but only if the manufacturer, on his own, wants to preserve his reputation or protect himself against damage suits. There's no law that says new chemical additives must be proved safe before they can go on the market. And 700 to 800 of them have reached the market as ingredients of foodstuffs—to make them taste better, look brighter, or last longer.

However, Congress is feeling two kinds of pressure to require testing:

- Chemical makers, food processors, and the Food & Drug Administration want to safeguard the public against dangerous additives that might escape the present voluntary testing program.

- The American Cancer Society and others want all additives tested for cancer-producing properties—and automatically barred from use if they induce cancer in animals.

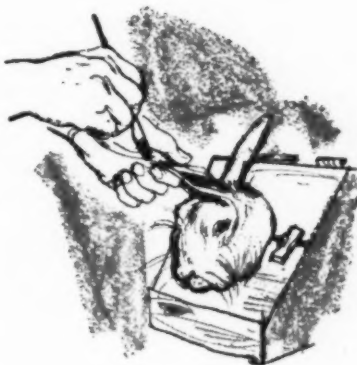
- **Close Calls**—The government does insist on rigorous testing of chemical pest killers and coal tar dyes, through the well-publicized pesticide amendment of 1955 to the Food & Drug Act and the Coal Tar Act of 1938. But its only control over chemical food additives is FDA's power to slap a court injunction on any producer using a chemical that's harmful to humans. And even this is exercised only when FDA gets a complaint—usually after the damage has been done.

"We have had some narrow escapes in the food chemicals field in the past," admits Asst. Secy. Eliot Richardson of the Health, Education & Welfare Dept. The danger will persist as long as testing is purely voluntary, and unscrupulous manufacturers can take advantage of this to market toxic products. It may also continue until the tests themselves are more uniform.

- **Dying Dogs**—Over the years, a good many food chemicals have been hastily withdrawn from the market when it was discovered—too late—that they were dangerous. For instance, millers use nitrogen trichloride to induce aging in flour for 30 years before it was fed to dogs—and discovered to be toxic. In the subsequent investigation, it de-



The rat is receiving a massive dose of a chemical food additive as a test of its acute toxicity—will it bring sudden death?



The rabbit's smaller dosage will test for the additive's chronic toxicity—will the chemical, build up poisons in the body bit by bit?



The human being gets a skin test to determine contact safety of a new additive—will it create a rash or cause irritation on the human skin?



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veloped that it was harmful to humans, too. Coumarin, which tastes and smells just like vanilla, was added to the flavoring in chocolate until it was found to be toxic in quantity, and although no human illness was ever traced to the substance, producers voluntarily began omitting it from their recipes.

Some of the artificial sweeteners are now under suspicion. Prodded by the sugar industry, FDA found a few years ago that two of them—dulcin and p-4000—were poisonous. And some scientists think others only won FDA approval because the tests were defective.

• **Many Proposals**—It's to avoid situations such as these that Congress has a dozen different bills pending before a House Interstate & Foreign Commerce subcommittee. But before a final version becomes law, a number of differences between FDA and various industries involved must be reconciled.

Perhaps the deepest rift between them is on who decides whether an additive is safe for market. Chemical makers and food processors object to surrendering this decision to the government; FDA insists on full licensing powers for itself. Most industry representatives would like to vest authority in the federal courts, preferably with a jury trial on the safety issues. So far, FDA's only concession has been to accept the advice of the National Academy of Science Food Protection Committee in evaluating the manufacturers' own safety tests.

The industry, afraid of a government muzzle on innovation, would also like a 90-day limit on the time a new additive could be withheld from market for testing. After that, FDA would have to go to court to stop it.

• **Semantic Woes**—There are also semantic troubles in legislating in this field. Some of the proposals would require labels to state clearly what chemicals had been added to foodstuffs, and the industry fears housewives would be frightened by the sinister sound of substances such as polymers of amino acids or hexoses, even though they are harmless.

The problem of defining "toxic" is even more serious. Researchers admit that measuring toxicity is pretty much a relative matter, depending on the type of tests and the judgment of the human scientist conducting them. Somebody must decide what techniques of chemical analysis to use and when to start and stop the studies. For instance, some scientist must determine whether to inject a single massive dose of a chemical into an animal's gastric system, or to put it into the diet of test animals for a month of controlled feeding.

Fortunately, everyone seems to agree on at least one point—two or more dif-



FURTHERMORE

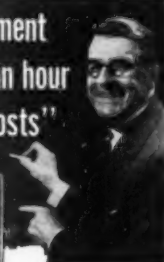
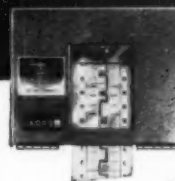
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ferent species of animals should be used in acute and chronic tests of any new additive. And one should be run on something other than a rodent. Dogs, cats, and monkeys have proved extremely valuable as checks against results with rodents such as rats, mice, guinea pigs, and rabbits. But someone still has to evaluate the test results—and lab animals, like humans, tend to react differently to the same conditions.

The toxicologist working with food chemicals must also choose a diet for the test animals. The choice lies between a diet suitable for animals and a diet patterned after human tastes. Which will be better for the animal—and which will be the better index of how the additive will affect humans?

• **Surprises**—All these quandaries complicate the writing of a bill that will satisfy all sides. And even if all the known problems are solved, there's always the prospect of surprises, such as the discovery after 30 years that flour treated with nitrogen trichloride was toxic—or the finding, only a few years ago, that DDT in large quantities can cause damage to the human body under certain specific conditions.

Industry's attitude isn't helped any by clauses in some of the proposed legislation that might bring all the hundreds of additives already in use up for re-evaluation—a prospect that industry doesn't relish at all.

• **Serving a Purpose**—But industry's opposition is more concentrated against something known as "functional value." FDA is pumping for a clause in the law banning a chemical food additive unless it has a "functional value" as an ingredient. But no one has yet satisfactorily defined what the term "functional value" must mean. Depending on the foodstuff, it might be color, taste, lasting quality, texture, or nutritive value, for example, that the additive contributes to a product's general improvement.

FDA thinks the clause should be included to prevent food processors from injecting unnecessary toxic chemicals into food that might mask such things as poor manufacturing and storage practices. The industry counters that "functional value" is, in the first place, difficult to measure—and that no processor would add a relatively expensive chemical anyway unless it adds some real value to the food.

Rep. John Bell Williams (D-Miss.), whose health and science subcommittee is mulling the issues, says he will try to come up with an acceptable compromise definition of the elusive "functional value." If he succeeds, there may be a chance that a compromise food additive bill may get out on the House floor before this session of Congress is over—something that has been pending ever since 1949. **END**



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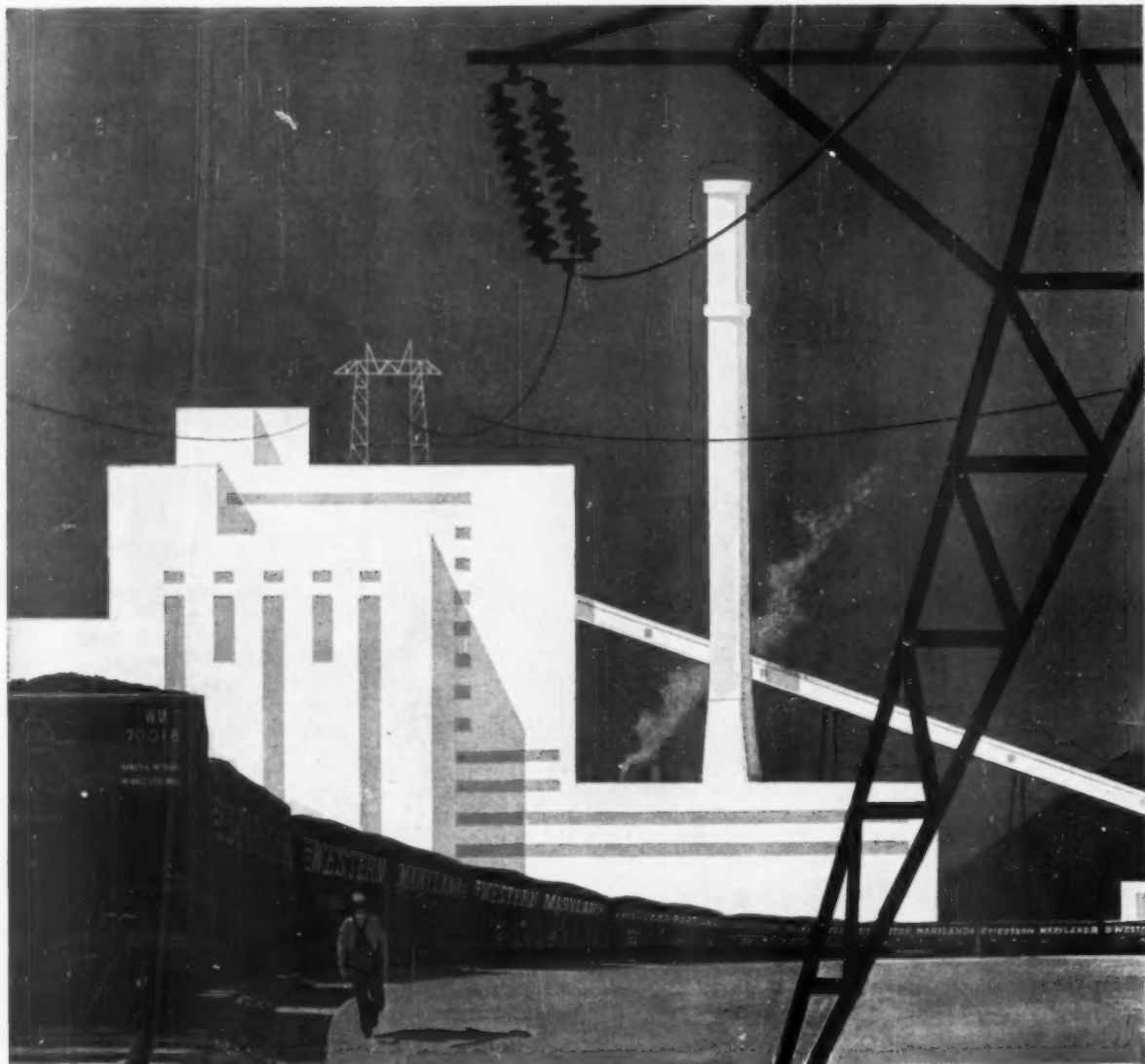
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In Research

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Sound Waves Break Up Heredity Molecules In War on Mysteries of Human Cell

Sound waves are being used at Harvard in an attempt to unravel new understanding about the mysterious functioning of human cells.

The sound waves are used to break up molecules of deoxyribose nucleic acid (DNA), which most scientists believe is the essential transmitter of hereditary qualities. The DNA molecule has a backbone of two long chains of atoms, coiled together in a double spiral that, with its pairs of side molecules or "bases," is not unlike a spiral stairway.

In tests of heredity, sound waves at a frequency of 9,000 cycles per second are made to break up long chains of DNA carrying some such known trait such as a resistance to streptomycin. The longer the exposure to the sound waves, the smaller is the average size of the particles into which the DNA is broken.

Finally, samples of DNA that have been exposed for varying times are tested for their relative ability to pass on to other molecules their original hereditary quality.

The Harvard researchers have found that the molecular fractions must have a molecular weight of at least 1-million in order to pass along any trait. Before exposure to the sound waves, the average DNA molecule has a molecular weight of about 6-million.

The present thinking is that the bases, or "rungs," of the DNA molecules—through their type, or perhaps their sequence—provide a sort of master plan or code for the functioning of the human cell. So far, only four types of bases have been identified.

• • •

Chemists Hear the Latest Word on Hormones, Pain Killers, and Flying Power Plants

The latest research news, on everything from pharmaceuticals to space fuels, enlivened last week's annual meeting of the American Chemical Society in San Francisco. Attention grabbers included:

- A new drug, whose pain-killing power is 100 times that of morphine, has been developed at the Cutter Laboratories. The alkaloid compound is called piperidine, and is being tested on humans and animals. If piperidine pans out, it will open the way to a whole new line of better and stronger pain killers.

- In hormones, the most noteworthy advance is a new method for the direct synthesis of aldosterone, the hormone that controls the salt balance of the body and is used to treat human ailments like Addison's disease. The University of Michigan achieved its total synthesis goal by starting with simple coal tar chemicals. Earlier attempts, which sought "partial synthesis" of aldosterone by starting with such natural steroids as

cholesterol failed because of the extremely complex structure of the hormone.

- A ramjet atomic-oxygen power plant, for use on permanent earth satellites, has been designed by Aerojet-General Corp., under contract to the Air Force. The plant is planned to capture single oxygen atoms from the upper atmosphere and force them to recombine into oxygen molecules. This process releases great quantities of energy that can be used as a propellant, sufficient to keep a satellite up to an orbital speed of 18,000 mph. indefinitely.

• • •

Synthesis of Cholesterol From Acetate May Lead to Its Control in the Body

Cholesterol—the fatty substance present in many types of heart and blood disease—has been synthesized from acetate in a joint project by the University of Wisconsin and the Madison (Wis.) VA hospital. From this, it is hoped that the synthesis of cholesterol in the human body, and its relationship to atherosclerosis, may be understood within a few years (BW—Feb. 11 '56, p172).

Acetate, the principal component of vinegar, occurs naturally in body cells. The Madison people ran acetate through a series of complicated steps, linking it with various enzymes; eventually, they produced cholesterol in greater quantities than had ever been done outside of a cell system.

The next step is to identify all the intermediate products that lay between the acetate and cholesterol. When this is done, the researchers say it should be possible to establish the amount of cholesterol being turned out at a given time by the human body, and so to regulate it if the amount is dangerous.

• • •

Hope for Person-to-Person Skin Grafts Seen If Chemical Can Be Identified

Researchers, working in a variety of labs, think they are on the trail of a way to graft skin successfully from one person to another.

The difficulty in skin grafting has been the body mechanism that eventually rejects transplants unless they come from an identical twin. The solution, it is hoped, may lie in a second exception that has been observed: Transplants of skin from alien sources have been made successfully on very sick people in the final stages of a disease. From this, researchers suspect in very sick persons the presence of a chemical that cancels out the anti-transplant defense mechanism. Their work is aimed at isolating and identifying this chemical.

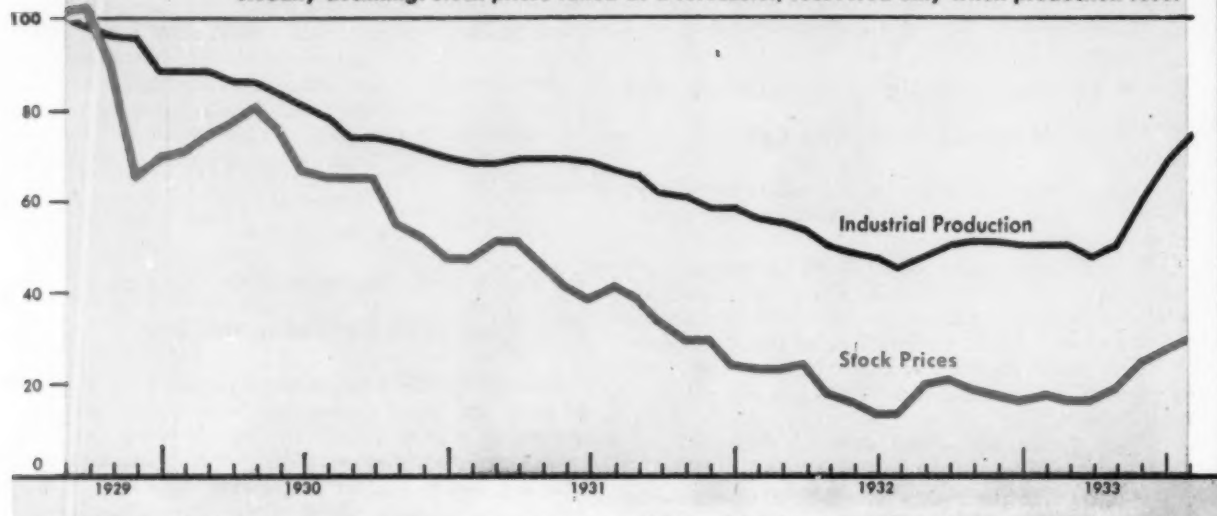
As a final refinement, some scientists hope that eventually it will be possible to type skin, in the manner of blood groups, and so even set up banks of skin for transplanting.

The work, whose value could be immense in time of disaster, is being encouraged by the Atomic Energy Commission. Among the research centers involved are the Universities of California and Wisconsin.

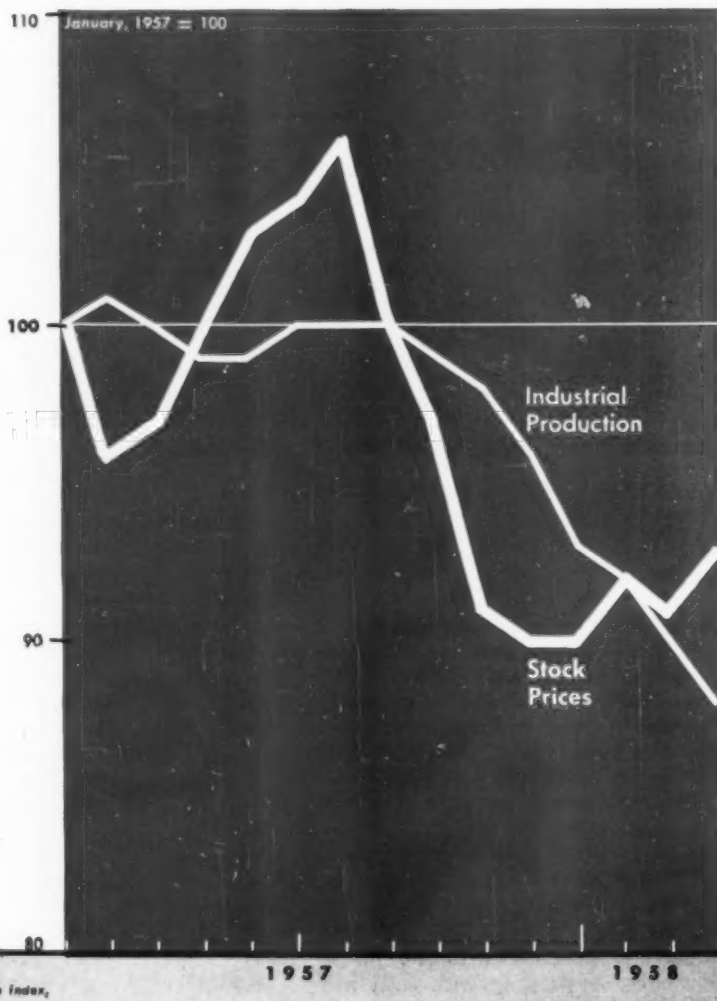
THE MARKETS

August, 1929 = 100

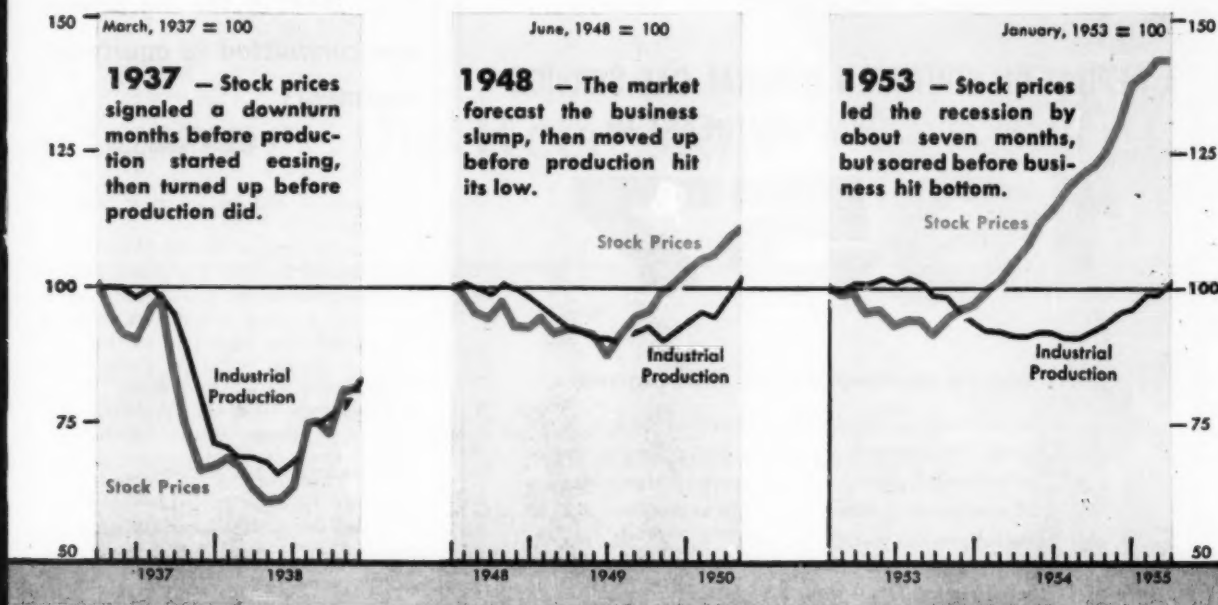
1929 — The market crashed, rallied, then plunged again, while business activity was steadily declining. Stock prices failed as a forecaster, recovered only when production rose.



1957 — The market decline last July led the production drop. But recently stock prices have showed signs of strength. The question now: Are stocks again forecasting a business recovery?



Data: Federal Reserve Board; Dow Jones 30 Industrial Stocks Price Index.



Are Stocks Forecasting a Turn?

These charts show that the stock market has been remarkably consistent in forecasting the end of three business recessions—and they raise the possibility that it may now be forecasting the end of the 1958 recession.

For a couple of months, the market has been shrugging off bad news. It has actually been rising mildly, as the chart shows. Early this week it rose again—in spite of a spate of company reports showing depressing earnings in the first quarter.

Many an analyst—whether he has money in the market or not—is wondering if the upward trend of stock prices is not actually forecasting a recovery in business.

But if you do anything more than look at the charts, you have to come to a hedged conclusion. For this is a new market—it is not like the market of 1938 or of 1949. And today's rising stock prices may be forecasting nothing at all about general business.

• **The Chart Record**—In the Great Depression, as the chart shows, the market forecast nothing. It moved up and down pretty much in harmony with movements of general business, as measured by the index of production.

Since then, however, the stock market can take some honors for its performance as an economic indicator in recessions. Generally, stock prices dipped before production fell off. Generally, too, prices recovered before production did.

The market, however, is not an automatic indicator:

- False signals are not uncommon. The market may rally several times only to fall back before it finally starts a consistent run-up.

- Lead times vary. Sometimes it has been only one month, sometimes it has been as long as seven months, before the production index fell into line with stock prices.

- **As a General Forecaster**—Aside from predicting the end of recessions, the market has established a fair reputation for itself as a general forecaster year in and year out. During the 1920s and 1930s, rising stock prices were pretty consistently followed by improving production (although the production gains did not necessarily translate themselves into gains in profits).

Two economists studying this period found the stock market led production by an average 6.6 months on the upswing of the business cycle and by 9.4 months on the downturn.

But the two—C. S. Cottle and W. T. Whitman—found a change in the record after 1939. Since the Depression, lead and lag times have varied so much that they contend "the cycles are so lacking in synchronism that lead and lag relationships are meaningless."

Other economists get better results. The National Bureau of Economic Research, which did much of the pioneering work on cycle theory, has found stock prices a useful indicator. The late Wesley C. Mitchell and Arthur F. Burns, who wrote the classic *Measuring Business Cycles*, found that stock prices usually turn up in the last third

of a period of business contraction and turn down in the last third of an expansion period.

Geoffrey H. Moore, now working at the bureau, uses eight leading indicators—statistical series that signal a turn in business cycles. Moore has found that stock prices perform better than the others—such things as spot prices, new orders, average hours worked, or commercial contracts let—in calling turns in general business.

- **Hedging**—All of these studies make it plain that any student of business or Wall Street has to look at many things other than the trend of one set of prices. The sentiment of investors, tax considerations, anticipations of company earnings, politics, price-earnings ratios—all these and more affect the lead times of the statistics.

The 1953-54 recession was a classic example. Stock prices then turned up months before production began to move. But there were other forces at work. The Federal Reserve Board was easing money market conditions rapidly, which made the yields on stocks attractive compared to bonds. The excess profits tax hanging over from the Korean War was expiring, which reinforced prospects for good earnings. Investors had enormous confidence in the then newly installed Eisenhower Administration. These factors not only caused stock prices to rise but sent them soaring.

- **The Institutions**—Moreover, 1953 saw the first clear emergence of the force that may invalidate all past per-

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STORY starts on p. 154

formance of the market as a business indicator.

Since the end of World War II, the institutional investor has grown mightily as a force in the market. In fact, it is fair to say that this market is structurally different from past markets because it is now primarily a market of institutional investors—pension funds, mutual funds, bank-managed trusts. By and large, these institutions have a steady flow of money coming into them. Most of them are committed to investing in equities. And the result may well be a stabilizing influence on the market such as it has never had before.

Today, says Ragnar D. Naess, partner in the investment counseling firm of Naess & Thomas, "the speculator and the general public are unimportant in shaping the trend of common stock prices. The speculator has been relegated to a minor position by legislation, and the general public is investing largely through mutual funds."

This built-in stabilizer in the market in some ways resembles the contracyclical devices of government.

It also resembles the non-cyclical buying by life insurance companies that has given stability to the bond market. Institutions are buying for the long pull rather than a quick profit. So they're less likely than are individuals to buy or to sell on a short, sharp rise or to liquidate on sudden dips. When these big buyers—who account for about 30% of all public transactions on the New York Stock Exchange and influence others—get to feeling bearish, they won't usually sell out their stocks and hold cash. Instead, they switch to defensive issues and slow down on their new purchases.

• **Influence Emerging**—The market's new stabilizer apparently made a difference in the 1953-54 recession. In most earlier recessions, stock prices overshot the decline in production or earnings, falling faster and further on the downswings. But in 1953 the decline in stocks was minimal and the rise went well beyond the following hike in business.

This market seems also to be reflecting the influence of the institutions. Except for the selling climax in mid-October, there have been no great waves of selling pressure. It has, rather, simply faded away for want of investors with a real appetite to buy. What's been going on, says the head of one of the

"Curing" the Recession

GVA

BUSINESSMEN are being criticized for having no formula to "cure" the recession.

If statements by businessmen on the problems of recession and recovery do not bear the imposing label of "cures," it may be because businessmen sense that the very idea of "curing" a recession reflects a misconception of the nature of recessions, a failure to understand that the recession itself is a "cure" for something else.

What Recessions Are For

It is generally agreed, among businessmen at any rate, that booms generate unsound tendencies. These tendencies occur in a variety of combinations that defies close analysis, prediction, and treatment. Yet, whatever the combination may be in a particular case, it requires correction, and the correction involves a temporary decline in business activity.

The best way to prevent recessions is to prevent booms, and the best way to minimize recessions is to restrain booms.

Once the recession comes, the job of readjustment is much too big, too complex, and too imperfectly understood to be accomplished by any sort of governmental action or policy. It is accomplished by business itself under the pressure of contracting markets and tightening competition.

Inflationary "cures" for recession have important drawbacks. One is that they are not very effective unless administered on a dangerously large scale. Another is that,

even when applied on a comparatively moderate scale, they result in a permanent debasement of money. A third is that they tend to prevent the readjustments that are needed after booms.

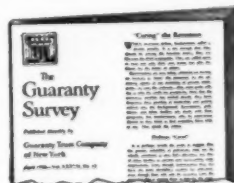
Governmental "Cures"

Most of the current debate over proposed "cures" for the recession has been concerned with the relative merits of tax reduction and larger governmental spending. Both of these alternatives are open to the objections just mentioned. Their effectiveness as "cures" is questionable, but that they contain the seeds of inflation is unquestionable, especially in view of the fact that the Government is already operating at a heavy deficit.

Truly constructive action by both business and government in times of recession is aimed at the removal of artificial restraints, not at the administration of artificial stimulants that would saddle the economy with the almost certain evil of a permanently cheapened dollar in a highly dubious endeavor to "cure" the temporary evil of recession.

From the April issue of THE GUARANTY SURVEY, monthly review of business and economic conditions published by Guaranty Trust Company of New York.

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"...with the war over, many investors looked for a depression..."

STORY starts on p. 154

largest investment trusts, is mainly a simple transfer or switching process. The institutions have been selling the growth stocks they were so avid for a couple of years ago—and individuals have been buying them. Trading has been light compared to what it was in prewar days.

• **More False Signals**—With the institutions playing this way, the market may actually be more prone to giving false signals now than it was in the past. Where the market would have declined in the pre-institution days, it now merely stabilizes. Thus the market may chalk up any number of false starts toward the end of a recession before it gives a true signal.

• **Sentiment**—Just plain seat-of-the-pants feeling—that unmeasurable quality known as confidence or sentiment—also has a role in making and breaking markets. The market broke sharply in 1946, for example, when business was getting off to a flying start on the post-war boom. But in those days, with the war just behind us, many investors felt that a postwar depression was inevitable. The market collapsed despite all the encouraging reports from companies.

The market reflects sentiment in many ways. Arthur Wiesenberger & Co. has just published a study showing that bull markets tend to advance steadily and consistently. A bull market will go up for months on end with only minor breaks of a day-and-one-half when prices fall back.

Bear markets will also advance—most of the time, in fact, they will be advancing rather than declining. But the advances, while they may last months, will be irregular and selective. The declines, while they may only last weeks, will be broad and sharp even in the bear market of 1929-32, when the Dow-Jones industrial average went from 386 to 40, there were just as many months of advancing or holding prices as months of declining prices.

• **Questions**—These things put together—the market's own false signals, the new role of the institutions, and unpredictable sentiment—lower the value of stock trends as a forecaster of business.

Give them all the weight you want, however, and there's one conclusion from stock prices that still seems valid. The chances are very good that when the recession ends, it will be stock prices that lead the upward march. **END**

Short cuts with Recordak Microfilming

Latest reports on how this low-cost photographic process is simplifying routines for more than 100 different types of business . . . thousands of concerns



SURE OF SCORE AT 19TH HOLE

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This all but ends questions about charges—frees the girl who used to be glued to the phone for two weeks after bills went out. And it cuts costs and speeds up the billing operation, too—no need, now, to list dates and describe charges on bills. Another advantage: members can support charges at tax time.



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Customers of Lakedale Telephone Company can readily recall long-distance calls—even if "forever on the phone."

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The May Co., one of the country's leading stores, discovered that microfilm copies cost less than carbon copies and are far more practical. More than \$10,000 per year is saved by using a 2-part sales check instead of one with 3 parts. And a like sum is saved on storage costs.

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Free booklet gives broader picture of uses in business and industry. Write for "Short Cuts that Save Millions," or for more specific help have a Recordak Systems Man call. No obligation whatsoever!



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A-4

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In the Markets

• • •

Earnings of Three Big Steel Producers Fail to Meet First-Quarter Dividend

The predicted downturn in the steel industry's first-quarter earnings became a recorded fact this week (BW—Mar.8'58,p118). By midweek, with three of the top six producers reporting, none had earned its dividend.

Republic, third-largest producer, reported 55¢ per share, against a dividend requirement of 75¢. National Steel reported 51¢ per share, failing to meet the 75¢ dividend rate it lowered from \$1 earlier this year. And Youngstown Sheet & Tube reported \$1.04 against a \$1.25 dividend.

Three other steel companies were also faring poorly: Detroit Steel's first-quarter earnings were "about 12¢." This was close to the 12.5¢ dividend it paid in the first quarter which had already been cut from last year's 25¢. Crucible reported first-quarter earnings of 5¢ just half the first-quarter dividend it declared in February—a 75% cut from last year's 40¢ level. And Pittsburgh Steel reported it would show a first-quarter loss.

• • •

Caution Is Increasingly the Watchword With Institutional and Charitable Investors

Cautiousness in investment policy has become standard operating procedure for many institutional investors. This week, first-quarter reports of two funds showed just how far caution is being carried:

- United States & Foreign Securities Corp., a \$103-million closed-end investment company, made no stock purchases at all in the first three months, but sold over \$6-million in common stocks, including shares of Aluminium Ltd., Amerada, Louisiana Land & Exploration, Reynolds Metals, and Humble Oil.

- Chemical Fund, Inc., an open-end mutual fund, was a seller on balance and made only three completely new investments—in Firestone, Owens-Illinois Glass, and Texas Co. It sold shares in 21 different issues, including 11 drug stocks, which have been moving ahead of the over-all market (BW—Apr.19'58,p131).

• • •

Bond Market Slows Down a Bit After Bull Moves in Wake of Fed

The bond market this week pulled in its bullish horns a little.

Prices shot up in the wake of last week's aggressive easing by the Federal Reserve (page 29). Bonds had already been rising steadily, in anticipation of greater ease, but investors were surprised by the drastic nature

of the Fed's moves and the entire market soared, led by long-term Treasury bonds.

The steepness of the climb brought its reaction this week. There was no marked selling, but some speculators, who saw prices rise higher than expected, got out, (Treasury issues can be bought at 5% margin, and speculators who purchased long-term governments only a week before the Fed's move could make as much as 40% in short-term gains.)

More important, buying of bonds subsided. This week's cut in the prime rate by the nation's banks was regarded as so long overdue that it had no effect—it coincided, in fact, with the easing of prices. More buying will follow, but for the moment at least, investors are taking a breather.

While bond prices backed away from last week's peaks, they are still high and should go higher. But the outlook is for a slower and smaller rise than that of the past six months. At the same time, there is less likelihood of any of the indigestion that interfered with the first-quarter rise in bond prices—and lowering of yields. Demand for long-term funds is slackening, so the market should absorb new issues more smoothly.

Short-term interest rates should also stabilize at about the present low level. The 91-day Treasury bill rate, leading money market indicator, was just over 1% this week, and all other short-term rates—bankers' acceptances, commercial paper—have adjusted downward.

• • •

Study of Utilities' Defensive Charms Also Points Out Their Growth Traits

A detailed study of the recession-proof characteristics of utility stocks, made by J. Walter Leason of Gregory & Sons, a New York investment house, also points up the growth characteristics of the industry (BW—Mar.8'58, p112).

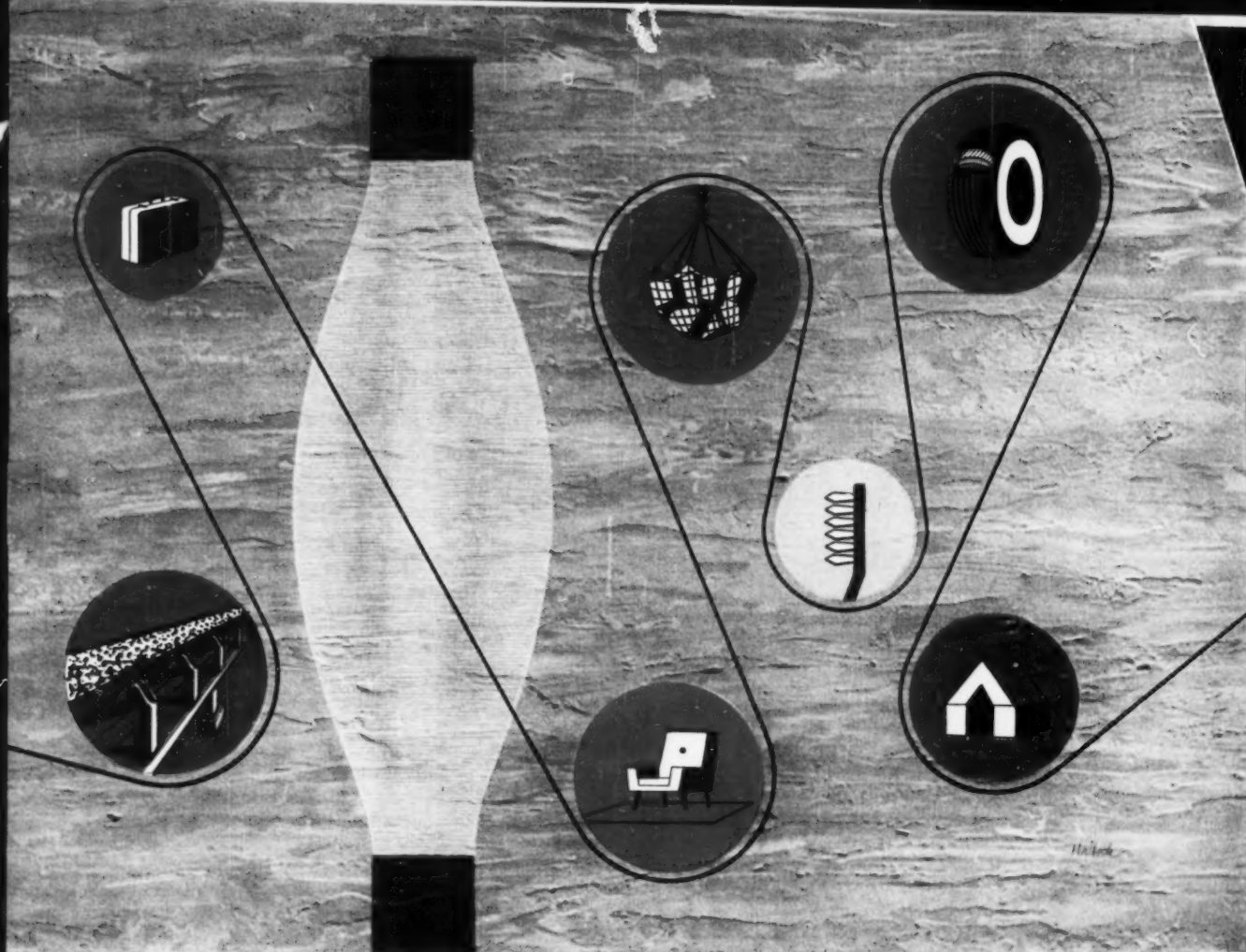
The study, *The Impact of Industrial Recession on Electric Utility Companies*, reviews the strong showing of more than 100 utilities during the 1954 and 1949 recessions. In addition, it makes projections of the probable effects of this year's decline on earnings, and comes to the conclusion that any moderate drop in power sales to industry would be largely offset by continuing gains in residential and commercial sales.

• • •

The Markets Briefs

Consolidated Edison of New York boosted its quarterly dividend this week from 60¢ to 70¢ on increased earnings. Even higher earnings are in prospect, for the following day New York's Public Service Commission approved an increase in Con Ed's monthly minimum service charge which is expected to provide over \$6.5-million annually.

New monthly investment plans are still sprouting on the Stock Exchange—although they show no signs of breaking down the doors as some Exchange officials had expected. For the first 10 days of April, a daily average of 150 new plans were started. During the first quarter, new plans ran at about 137 a day.



Man-made fibers now tailored for industry

Test-tube creations help solve industrial problems... with bank aid

Acetate, acrilan, nylon, and other man-made fibers, used alone or in blends with natural fibers, have been woven into our nation's wardrobe. Now they're bringing new utility, versatility, and durability to everything from tooth-brushes to filter cloths for chemicals.

These amazing fibers can be "tailor-made" to feature strength, fineness, toughness, resilience or other characteristics required by industrial specifications. The outstanding chemical and water resistance of the acrylics, for example, makes them highly useful in the chemical and electronics fields. Lightweight, high-tenacity rayon is expanding the uses of conveyor belts. And strong, resilient, "fatigue-proof" nylon and rayon dominate the tire-cord mar-

ket. New uses for man-made fibers are being developed every year. Included are luggage, upholstery, storage tanks, tarpaulins, carpeting, rope, shock absorbers, sporting equipment, and paper.

As a result, U.S. plants were called upon to produce about one and three-quarter billion pounds of these fibers in 1957—and demand is still growing.

The development of man-made fibers, as with any pioneering effort, has called for large amounts of capital and a great deal of forward thinking. The men in the industry find both at First National

City Bank. Here they can talk to *bankers* whose knowledge of the textile and chemical industries enables them to appreciate the problems and opportunities in the man-made fiber field. In addition to providing short-term money and helping with long-term financing, these *bankers* can provide up-to-the-minute market and credit data, not only for this country but abroad as well.

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In twenty furiously fast years, the career of Douglas Aircraft's young president has capsuled the granddaddy prop transport and today's rocket propulsion. Douglas developed the Roc 1 in the early '40's, has produced nearly 20,000 missiles of all types since — today has responsibility for the complete Thor missile system now in volume production. Why then, you might ask, should Donald Douglas, Jr. and at least 150 of his associates read a magazine such as *Business Week*, that's seldom if ever printed a logarithmic equation? Answer: because *Business Week* prints so much on the equation of business, itself . . . Wall Street and Washington, manufacturing and marketing, management and labor . . . so much more business news than any other magazine. But more than this, *Business Week* is meant for the management man who must keep up with the future . . . its function: report, interpret, point the trend. Because its enormous, all-business news-gathering facilities permit it to pinpoint the event, spot it in proper perspective, and present it fast and reliably, management men everywhere vote *Business Week* "most useful" of general-business and news magazines. Acknowledging their own best argument, they place more advertising pages in it, too. *You advertise in Business Week when you want to influence management men.*







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PERSONAL BUSINESS

BUSINESS WEEK

APR. 26, 1958



"Should I ask for a contract?" is a question that crops up when an executive is negotiating for a new job. He may find it a perplexing one—especially if he's worked for years under a friendly, informal agreement.

The answer should be no in most cases, say executive recruiting specialists (BW—Mar. 29 '58, p121). Only about 10% to 20% of top management men obtain contracts when relocating—and in most of these cases there's an element of special risk involved.

Generally, the specialists insist, it's a mistake to ask for a contract when you're dealing with a solid, well-established concern. They reason that you're almost bound to give the impression that you lack full confidence in the company—or worse yet—in yourself.

And once a contract is agreed upon, a third person—an attorney—enters the picture. His presence and function tend to put the whole transaction on a very formal and legal basis, with an almost inevitable lessening of good will between the parties.

Besides these disadvantages, there are two very practical drawbacks:

(1) The executive is "locked in" with the company, with little leeway for making a second move. Also, he often fixes his salary for a specified term and risks losing increases he might otherwise get. (Most contracts run for short terms—usually one or two years, with three-year terms unusual, and five-year terms rare. Normally, the contracts serve only an interim purpose and, by mutual consent, are abandoned at the end of the first term in favor of the usual informal understanding.)

(2) Since the company also takes a risk when a contract is made, it usually assumes a more demanding attitude toward the individual who asks for one and is more careful in its appraisal and final selection.

Executive recruiting specialists recommend that a contract be considered only when one or more of these circumstances prevail:

- Where the company itself admittedly is in a weak position and is trying to bolster a lagging management team. Here, the new executive is not only justified in asking for a contract, he's foolhardy not to. This applies particularly, the specialists say, where a "job doctor" is called in to give a transfusion to a sickly outfit. The job doctor—a troubleshooter with a reputation for being able to step into a company and clean up a bad situation within two or three years—is coming more into his own these days.

- Where the terms of compensation cover a wide range of benefits—and this, of course, is a fast-developing trend. If the deal is to include salary, possible stock options, deferred compensation, and numerous fringe benefits, a formal contract—or at least a "letter of understanding"—is almost necessary. (The informal "letter" can be used as a follow-up to a formal contract when it expires, to spell out details of compensation.)

- Where an experienced executive, often in middle age, is asked by a company to leave his old concern and give up job security, plus a pension or other retirement benefits. The specialists point out that a contract is fully justified in such an instance, even where the new company is solidly established. This point had probably caused more trouble in executive contract negotiations than any other issue, according to one leading consultant.

- Where the new company has a 65-year or other retirement rule, but indicates that (1) it sometimes makes exceptions to cover certain key executives, and (2) may do so for the incoming executive.

- Where the executive has reached the normal retirement age in his

PERSONAL BUSINESS (Continued)

BUSINESS WEEK

APR. 26, 1958

industry, and is approached by a new concern that wants to employ him on a part-time consulting basis. Here, contracts are used occasionally to insure against hit-or-miss employment.

- Where the job is overseas and entails family moving, etc.

Contracts hold **one clear advantage** for the man whose concept of the new job is somewhat clouded: **They can define precisely the scope and authority that go with the title.** This may be especially important, say some experts, where an entirely new position is created. In the current recession, for example, some companies are consolidating three or four medium-level executive jobs into a single top job carrying more authority.

Improved wash-and-wear shirts now are cooler and better looking. Executives-on-the-go are talking most about the comforts of the wash-wear, resin-treated 100% cottons (about \$6).

Many businessmen say that the new shirts—some with permanent collar stays, and some with their own plastic hangers—really don't require any ironing. Some conservative haberdashers, however, feel that the treated cotton can't be well tailored and that any shirt not ironed looks it. They recommend pressing any slight puckering around the seams.

For normal wear, some top clothiers suggest a blend of 65% Dacron and 35% cotton (\$8.95 to \$10.50) for the traveling executive. In hot weather, Dacron-cotton blends in lightweight weaves (about \$9.50) look fresher than cotton at the end of the day. And, for evening wear, pleated-front wash-wear shirts are available in the same "batiste" weave (\$12.50).

If your wardrobe includes wash-wear suits, here are some pointers for your laundress:

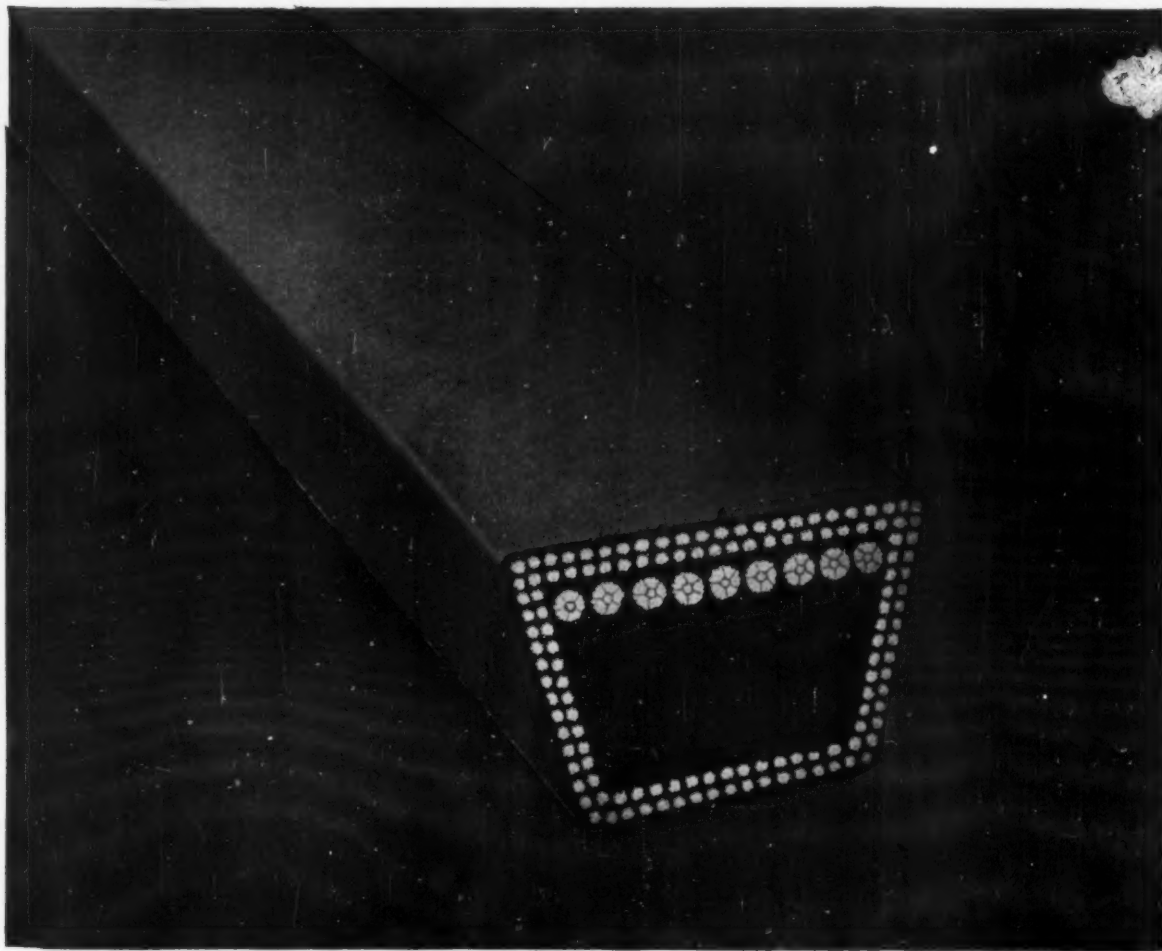
- **Machine washing and drying.** Wash suit 5 minutes in warm water (100F) using heavy-duty detergent or soap and water softener. Some fabric softener should be used in the final rinse. Tumble dry at 140F to 160F for 20 to 40 minutes. Remove immediately at the end of the drying cycle; hang coat on coat hanger and pants by the cuffs.
- **Drip drying.** Remove suit from machine dripping wet, then hang on a non-staining hanger. Smooth collar, lapels, and seams with fingers.
- **Hand washing.** Use same washing procedure as above.
- **Pressing.** If ironing becomes necessary use a damp pressing cloth with either a steam or dry iron with fabric control set at rayon.

Americans traveling abroad are being urged to carry U. S. silver "Peace Dollars" as symbols of national peace dedication. More than 40,000 have been distributed since February by the Chase Manhattan Bank, New York, as part of Pres. Eisenhower's "people-to-people" program. Minted from 1921 to 1928, and 1934 to 1935, the coin is said to be the only one bearing the word "peace" issued in the 20th Century.

Manners and modes: Antique dealers report decorative antiques most in demand today are church candlesticks, wood carvings, brass and bronze and ormolu tiebacks, Oriental objects, musical and military items. . . . Air France's 12-day tour for debutantes will include a ball at Versailles on July 12 for French and American debs. Write to Air France, 683 Fifth Ave., New York. . . . For opera fans, RCA Victor has a new two-disc set of LP's, **The Best of Caruso** (\$9.98).



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Then happily he hauled it home. "Good deal!" smiled dealer Dan.



2.

But Dan's delight was doomed to fade. The buyer passed away.
He lost a friend. He lost a sale—the widow couldn't pay.
Black's partners had his cash tied up to wait a court's decision.
"Why didn't I insure the sale?" sighed Dan, "what cloudy vision!"



3.

"I should have acted when the Travelers man (with so much sense)
Explained Group Creditor Insurance and its small expense . . .
I'd be paid the covered balance at a borrower's demise—
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4.

Well, milk that's spilled is down the drain—Dan didn't stay dejected.
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A CASE STUDY:

How Colgate-Palmolive's resumption of consolidated financial reports has changed its postwar financial picture

SALES: 1948 1949 1950 1951 1952 1953 1954 1955 1956 1957
(IN MILLIONS OF DOLLARS)

As Once Reported:

Domestic \$220.3 \$204.0 \$211.9 \$223.8 \$245.7 \$257.4 \$261.8 \$285.6 \$291.0 \$268.7

As Now Reported:

Domestic 220.3 204.0 211.9 223.8 245.7 257.4 261.8 285.6 291.0 268.7
Foreign 81.9 87.0 100.1 122.7 135.6 148.0 162.5 183.0 217.5 238.2

WORLD-WIDE SALES 302.2 291.0 312.0 346.5 381.3 405.4 424.3 468.6 508.5 506.9

NET EARNINGS:

As Once Reported:

Net from Domestic Operations \$5.5 \$9.2 \$13.9 \$4.4 \$7.8 \$8.0 \$7.7 \$9.0 \$4.9 \$6.9

Dividends from Foreign 2.1 1.9 1.8 1.9 2.3 4.0 4.8 5.0 5.6 7.5

Subsidiaries 7.6 11.1 15.7 6.3 10.1 12.0 12.5 14.0 10.5 14.4

Total \$3.56 \$5.33 \$7.66 \$2.79 \$4.38 \$5.02 \$4.96 \$5.50 \$4.05 \$5.60

Per Share of Common 7.6 11.1 15.7 6.3 10.1 12.0 12.5 14.0 10.5 14.4

As Now Reported:

Net from Domestic Operations \$5.5 \$9.2 \$13.9 \$4.4 \$7.8 \$8.0 \$7.7 \$9.0 \$4.9 \$6.9

Dividends from Foreign 2.1 1.9 1.8 1.9 2.3 4.0 4.8 5.0 5.6 7.5

Subsidiaries 1.0 1.4 5.3 3.7 4.5 5.2 4.5 3.1 5.0 5.5

Earnings Retained by Foreign Subsidiaries 8.6 12.5 21.0 10.0 14.6 17.2 17.0 17.1 15.5 19.9

Total \$4.08 \$6.02 \$10.32 \$4.55 \$6.44 \$7.28 \$6.81 \$6.74 \$6.04 \$7.81

Per Share of Common \$4.08 \$6.02 \$10.32 \$4.55 \$6.44 \$7.28 \$6.81 \$6.74 \$6.04 \$7.81

It Can Make a Big Difference

Some companies are going back to their prewar practice of consolidating foreign with domestic accounts.

Before World War II, it was common practice for U.S. companies in worldwide trade to consolidate the sales and earnings of foreign subsidiaries with those of domestic operations. Conditions were stable enough for the combined figures to mean something to the stockholder who read the reports.

The war changed this, of course. Foreign subsidiaries vanished—as war casualties or as victims of nationalism. Currencies ran wild, and a company treasurer couldn't tell from one day to the next how much foreign earnings were worth in U.S. dollars.

Some world traders had never consolidated their financial reports, so they didn't have to change in wartime and postwar conditions. But most had to revise their reporting method in the early 1940s to show in their earnings statements not the sales and profits of foreign subsidiaries but only their cash dividends, translated into dollars.

Some are still on that basis—"We figure a buck isn't a buck unless we have

it in the bank," says one treasurer—but there are signs of a major shift back to consolidated reports. Even companies such as American Radiator & Standard Sanitary Corp. and Sylvania Electric Corp., which have never consolidated their reports, are thinking of doing so.

• **Big Difference**—Among the companies that have just resumed the prewar practice of consolidating their accounts are Crane Co. and Colgate-Palmolive Co. The tabulation above shows how drastically the switch affects Colgate's annual report for 1957.

A strong illustration of the change can be drawn from looking at dividends as a share of earnings. In 1950, for example—Colgate's most profitable postwar year—the company paid out about \$6.4-million from net income, not consolidated, of \$15.7-million. This payout of only 41% probably didn't please all stockholders, but they accepted it on the theory that postwar expansion required an extra heavy plowback of profits.

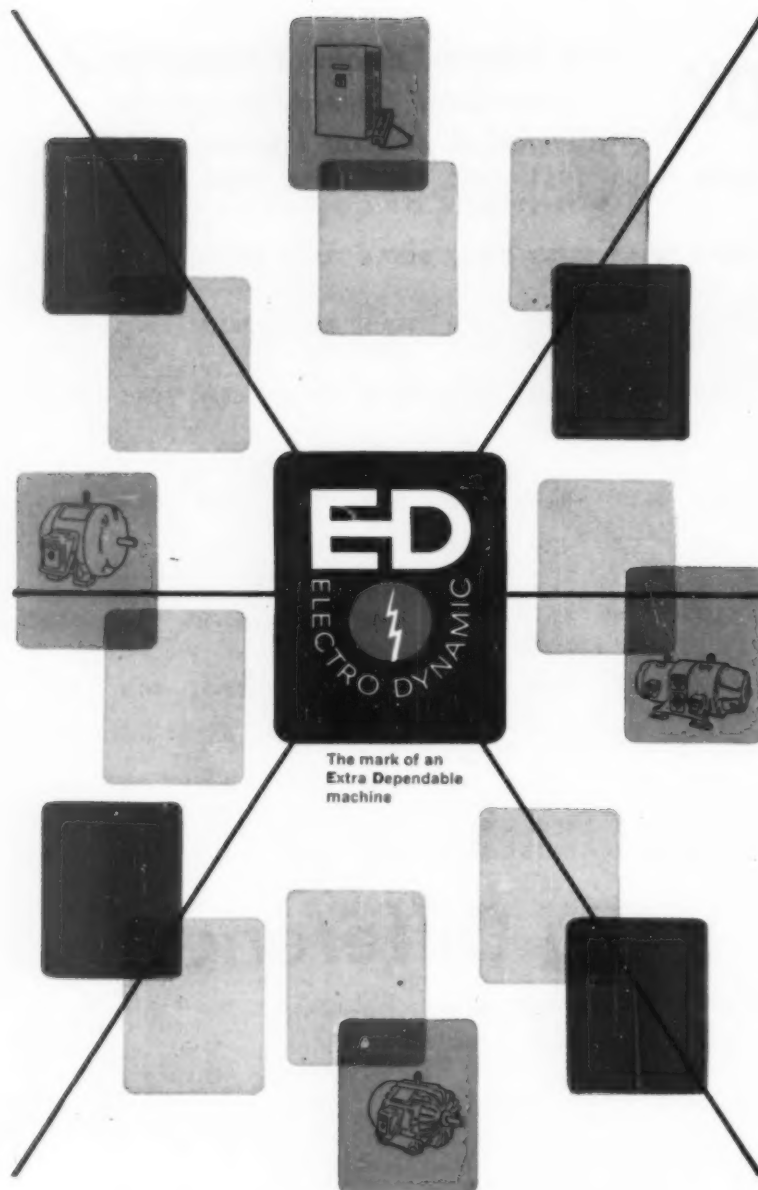
If foreign operations had been consolidated with the domestic report instead of being set forth in supplementary statements, net income would have been shown as \$21-million. That would have lowered the payout to only around 30%. Many stockholders might have howled at the annual meeting.

In its choice of unconsolidated reports for the years between 1944 and 1956, however, Colgate was obviously concerned less with possible stockholder protests than with the conservative accounting policy of recognizing only assets and profits that were available and appraisable at a firm value.

Last year, says Vice-Pres. and Secy. Hugh Jewett, was the first when the company felt conditions overseas were stable enough to permit accounts to be consolidated again.

• **Dollar Trouble**—Crane Co., which also returned to a consolidated report for 1957 after a long layoff, had several reasons for delaying as long as it did.

One was its trouble in getting dollars out of Great Britain, though this ended when Canada liberalized its currency exchange restrictions in 1951. British Crane Co. is a subsidiary of Canadian



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Crane, and the Canadian company has always been able to get its dividends from Britain. Until 1951, the difficulty was to pass the dividends on from Canada to the U.S.

Crane didn't consolidate its reports immediately after Canada's 1951 action, a company officer explains, because it wanted to wait until it wouldn't look as if "we were pulling money away from dollar-short countries."

• **Unwise Policy?**—In contrast to companies like Crane and Colgate, some corporations don't consolidate their reports because they think it is basically unwise. In this group are International Harvester Co., St. Joseph Lead Co., and International Business Machines Corp.

Harvester suffered heavy losses in its investments abroad during two world wars. "You can call us conservative or just experienced in the matter," says Vice-Pres. and Treas. William R. Odell, "but we feel that adding up earnings, some of which would be in cash we can't move or that may be devalued, would give the stockholder the wrong impression. The most accurate thing to do is to count only remitted dividends—cash in hand."

St. Joseph Lead, big producer of lead and zinc, feels the same way about it. "Why kid your stockholder and show those tremendous earnings when you never know what's going to happen?" asks George I. Bridgen, vice-president and treasurer.

For example, St. Joseph has a major Argentina subsidiary, Compania Minera Aguilar, S.A. "We never consolidate our Argentine figures because we can't pin down the value of the peso," says Bridgen. The annual report carries a statement of the subsidiary's income—in pesos. "We publish those figures with the idea that anybody who wants to convert them can," Bridgen explains.

• **IBM Thinking**—Last year IBM received about \$6-million in dividends from its wholly owned but independent subsidiary, IBM World Trade Corp., but this sum represents only about 22% of World Trade's net of \$27.2-million.

IBM doesn't consolidate these figures with those of domestic operations because (1) not all its foreign earnings are available, due to currency restrictions abroad, and (2) World Trade is forced by the nature of its business to reinvest a large part of its earnings.

Most of World Trade's revenues, IBM explains, come from rental of IBM products that it makes abroad. This foreign business is expanding rapidly, forcing World Trade to reinvest in plant expansion. Also, a rental business requires heavy investment.

• **Adequate Disclosure**—Of course, most companies that don't consolidate their accounts still disclose, one way or

A REPORT TO MANAGEMENT ON HOW

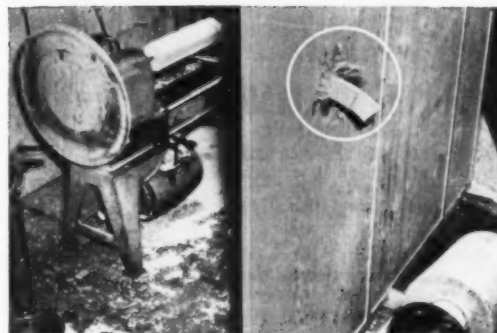
Industry cuts costs with FIR PLYWOOD

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- ☐ SALES _____
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- ☐ MAINTENANCE _____
- ☐ CONSTRUCTION _____
- ☐ _____



Beauty with brawn! This jaunty all-plywood Lyman 19-foot runabout is an outstanding example of the hundreds of thousands of fine family craft responsible for today's boating boom. The gracefully contoured clinker-built-with-plywood hull gives flashing acceleration and sports car maneuverability—plus stout, seaworthy construction that means extra safety when the going gets rough. Exterior plywood helps builders like Lyman turn out boats that combine style and quality without the penalty of a high price tag.



Saved: one life, thanks to this low cost fir plywood safety screen at Douglas Aircraft, California, which stopped a part hurled from a fast-spinning lathe only a few inches from a workman's head. Light weight plywood screens had been ordered in place by plant safety engineers as a precaution against just such accidents.



Long life, low cost! Big, easy to read overlaid plywood signs like this take the guesswork out of motor-ing in Washington State. They combine the strength of Exterior plywood with plastic-like fused resin-fiber surfaces. And because these signs cost less and last longer than metal, they mean big savings to taxpayers. Commercial sign manufacturers, too, who have switched to overlaid plywood report that it cuts finishing and fabrication costs, and stands up better under severe weathering and damage from vandals.

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**WHEN BUSINESS MEN WANT BUSINESS
NEWS THEY TURN TO BUSINESS WEEK**

another, the results of foreign operations. The American Institute of Certified Public Accountants urges "careful consideration" of whether or not to consolidate accounts, noting "uncertain values and availability of the assets and net income of foreign subsidiaries subject to control and exchange restrictions." But it adds that, whatever the decision, "adequate disclosure of foreign operations should be made."

Companies make this "adequate disclosure" in different ways. International Harvester, for example, devotes a four-paragraph note in its annual report to its investment in foreign subsidiaries and its equity in their net income (\$28-million last year) but includes in its earnings only the cash dividends actually received (\$17-million last year).

On the other hand, General Electric Co., with earnings of \$247.9-million last year, lumps the earnings of its 27 foreign subsidiaries (most companies include Canadian operations as part of the domestic business) in a \$22-million item labeled "miscellaneous other income-net."

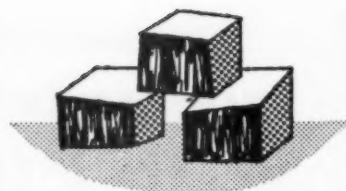
• **Building Up**—One reason that many companies have waited until now to consolidate their reports, either for the first time or as a resumption of prewar practice, is the fact that foreign earnings are just becoming significant. General Foods Corp., for example, has held off until its earnings from overseas operations became "as much a part of General Foods' business as its domestic business." Currency problems were also a factor.

Many companies are experiencing a happy rise in sales and earnings of foreign subsidiaries at a time when domestic business is declining. Cynics suggest that this may encourage companies to speed up their consolidating of financial reports. However, stockholders would soon see, as in Colgate's case, a sudden drop in dividend payout ratio to match the rise in net income.

• **Determining Point**—A company treasurer must decide if the parent has a large enough interest in a subsidiary to justify consolidating the accounts. Again, company policy varies widely.

W. Kenneth Daly, vice-president and controller of Anaconda Co., says: "We take into our consolidated account only those subs in which we have an equity of 75% or more. We don't consolidate Anaconda Wire & Cable Co., a domestic subsidiary, because we own only 70.3% of it."

Other companies consolidate all subs in which they have an equity of at least 51%. But a partner of a major accounting firm that checks the books of scores of big corporations comments: "There's no standard rule. Each company decides which cutoff point will best serve to show its operations." **END**



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of bear markets . . . a boost
for the oils . . . switching due
to dividend fears . . . weird
market moves.

Something to keep in mind, as Arthur Wiesenberger & Co. points out, is that while bull markets normally "advance rather steadily . . . with only occasional and brief reactions," bear markets "actually spend more time advancing than declining," and are "characterized by a relatively few weeks of sharp selloff, followed by months of irregularity and desultory selective rise . . . succeeded by another decline and period of hesitation." Thus in 1929-1932, when the Dow-Jones industrial average fell 90%, there were as many months when prices advanced or held firm as there were when prices dropped. In 1937-1942, with the index skidding 53%, there were 39 months of advance against 23 of decline; in 1946-1949, with the index off 25%, there were 20 months of rise, 16 of fall.

The oils got a boost last week from the April issue of Chase Manhattan Bank's much-read monthly petroleum review, according to boardroom talk. The publication said that an "upturn for production and refinery operations [is] in sight," and "likely to commence in the third quarter."

Streeters are amazed lately at many individual stock moves. Among the items: (1) Republic Steel common one day last week closed a point higher despite news that it had closed down its nut and bolt division due to lack of orders; (2) Underwood Corp. moved up a point after it became known that it had a large deficit in the first quarter; (3) Caterpillar Tractor rose more than a point after the news that its first-quarter earnings had fallen 78%, to 36¢ a share, compared with a 60¢ dividend for the period.

One expert's view of some former prime favorites: B. K. Thurlow, of J. R. Williston & Beane, says "the conventional blue chips and growth stocks of the old bull market look tired, faded, and overpriced." Thurlow admits that "in the investment parade it is not easy to predict what is going to be next season's favorite," but he adds that "it is usually safe to assume that last year's merchandise won't move very well until it is offered at bargain prices."



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The 1957 Billion Dollar Club

IN ASSETS:

	Assets at Close of 1957 Fiscal Year (Millions)	1946-57 Growth		Assets at Close of 1957 Fiscal Year (Millions)	1946-57 Growth
Bell Tele. System...	\$17,678	242.9%	Humble Oil	\$1,520	157.2%
Standard Oil (N.J.)...	8,712	227.5	Phillips Pet.	1,520	357.8
General Motors ...	7,498	278.1	Union Pacific	1,497	24.0
U. S. Steel.....	4,373	118.2	Chrysler Corp. ...	1,497	283.8
Ford Motor	3,432	290.0	Sinclair Oil	1,481	205.4
Gulf Oil	3,241	348.9	Comm. Edison ...	1,460	53.8
Socony Mobil ...	3,105	173.6	Union Carbide ...	1,419	223.2
Texas Co.	2,789	198.0	Shell Oil	1,407	196.8
E. I. Du Pont....	2,756	185.6	Westinghouse El.	1,401	178.5
Standard Oil (Ind.)	2,535	137.8	Aluminum Co. ...	1,316	276.0
Penna. R.R.	2,470	13.3	Balt. & Ohio.....	1,293	11.9
General Electric ..	2,361	175.5	Cities Service ...	1,293	*
Bethlehem Steel ..	2,260	153.6	Am. G. & E. System	1,283	117.8
Standard Oil (Cal.)	2,246	186.1	Intl. Bus. Mach.#	1,153	*
So. Pacific System.	2,156	32.8	Tenn. Gas Trans...	1,097	1175.6
Pacific G. & E. ...	2,146	116.5	Ches. & Ohio.....	1,087	76.2
N. Y. Central....	2,007	18.2	Pub. Svce. G. & E.#	1,071	119.4
Cons. Edison (N.Y.)	1,829	55.9	Southern Co.# ...	1,037	*
Sears, Roebuck ...	1,600	247.8	Anaconda Co.# ...	1,030	67.2
Santa Fe Ry.	1,548	27.0	Int'l Harvester ...	1,021	82.3

IN SALES:

	Sales in 1957 Fiscal Year (Millions)	1946-57 Growth		Sales in 1957 Fiscal Year (Millions)	1946-57 Growth
General Motors ...	\$10,990	459.9%	Gen'l Dynamics ..	\$1,563	*
Standard Oil (N.J.)	7,830	382.7	Nat'l Dairy Prod..	1,432	93.0%
Bell Tele. System...	6,314	201.5	Goodyear T. & R..	1,422	130.5
Ford Motor	5,771	544.8	Union Carbide ...	1,395	236.1
Gt. A. & P. Tea ...	4,500	213.6	J. C. Penney.....	1,313	93.9
U. S. Steel	4,378	192.6	Humble Oil	1,271	178.7
General Electric ..	4,336	375.4	Sinclair Oil	1,251	232.7
Sears, Roebuck ...	3,601	244.6	United Aircraft#	1,233	*
Chrysler Corp. ...	3,565	309.8	Republic Steel ...	1,227	197.1
Socony Mobil ...	2,976	291.1	Int'l Harvester ...	1,171	142.9
Gulf Oil	2,730	385.8	Radio Corp.	1,171	396.2
Bethlehem Steel ..	2,604	230.5	Firestone T. & R..	1,158	100.3
Swift & Co.	2,542	94.3	Procter & Gamble.	1,156	234.1
Texas Co.	2,344	299.3	Phillips Pet.	1,132	414.5
Safeway Stores ...	2,117	149.9	Amer. Tobacco ...	1,098	27.8
Standard Oil (Ind.)	2,010	208.8	Douglas Aircraft..	1,091	*
Westinghouse El.	2,009	431.5	Montgomery Ward	1,074	64.0
E. I. Du Pont....	2,000	202.1	Cities Service# ...	1,046	*
Armour & Co.	1,936	63.5	Continental Can..	1,046	391.1
Shell Oil	1,765	298.4	American Can# ...	1,006	290.0
Kroger Co.	1,674	191.6	General Foods# ...	1,001	214.8
Standard Oil (Cal.)	1,651	342.6	Int'l Bus. Mach.#	1,000	740.3
Boeing Airplane ..	1,597	*			

E Estimate.

* 1946 Figures Not Strictly Comparable.

New Member Last Year.



TV tells him what's going on

You won't see any westerns or ball games on these TV screens. But those odd-looking pictures are of real interest to the metallurgical observer. They tell him what's happening to the molten, white-hot steel as it pours into an ingot mold which is completely enclosed in a high-vacuum chamber.

One TV camera peers inside the large, closed vessel into which the hot steel is gushing, and this picture shows on the top screen. Another camera, whose picture appears on the bottom

screen, shows the action of the hot steel as it flows into a large ingot mold. The men who direct this tricky operation can follow the action carefully when they have these action pictures right at the control panel.

Bethlehem regularly casts ingots as large as 200 tons by the "vacuum-casting" method. The purpose of the high vacuum is chiefly to reduce the volume of hydrogen which, in a normal atmosphere, sometimes causes small imperfections to form within

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FINANCE BRIEFS

Commercial Credit Corp. is back to business as usual in Kansas this week. The big finance company has been granted a stay of a temporary court injunction forbidding it to collect further interest payments on car and appliance loans that the state's attorney general had alleged were usurious (BW-Mar.28 '58,p62). If CCC finally loses the suit, however, it will have to make refunds.

American Telephone & Telegraph this week put on sale the unsubscribed portion of its \$718-million convertible debenture issue (BW-Mar.1 '58,p76). The amount not subscribed was a shade over \$2-million.

Cash dividends of corporations that make public reports came to \$2,821-million, in the first quarter, Commerce Dept. says. That's about the same as the \$2,807-million in the same period the year before.

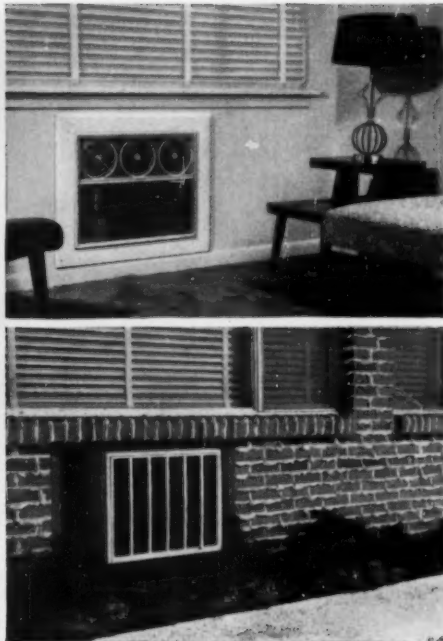
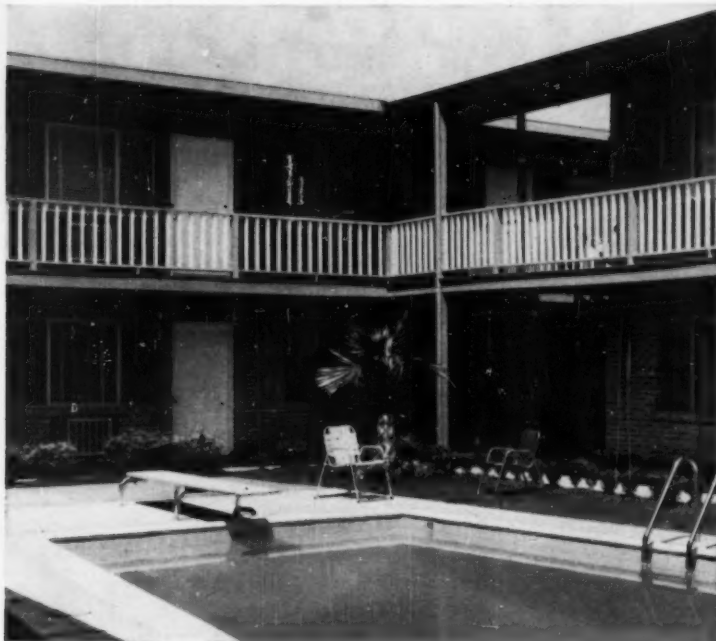
Contrary to the slump in sales and earnings of the nation's textile companies, Springs Cotton Mills this week reported its profits rose 7% last year on an 8% increase in revenues. Although the company is not publicly owned, it customarily reports sales and earnings presumably to keep employees informed. The workers' profit-sharing fund holds some Springs Mills stock.

Bonanza Air Lines is the first in the nation to take advantage of the federal Guarantee Loan Act, which is aimed at helping passenger carriers with re-equipment programs. The Civil Aeronautics Board has agreed to guarantee 90% of a \$4.3-million loan obtained by Bonanza from the First National Bank of Nevada to buy six 40-passenger twin-turboprop airliners.

Rail coach passengers in the 11 years ended last Dec. 31 declined from 329-million to 154-million, according to ICC. Despite fare increases, revenues from this source dropped from almost \$560-million in 1947 to \$430-million last year.

Sales by mutual funds came to about \$1.4-billion last year, compared with \$1.3-billion in 1956. California and New York purchasers split about one-third of the total, the National Assn. of Investment Companies reports.

Fire losses for the first three months of this year came to \$306.5-million, the National Board of Fire Underwriters reports. That's 2.8% under last year's \$315.4-million first-quarter loss.



Outside, a beautiful swimming pool; inside, the cool comfort of General Electric *Thinline* air conditioning. Of course, all tenants are contented.

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Each of the 48 apartments in this ultra-modern, garden-type development remains comfortably cool throughout the long, blistering Texas summer. One *Thinline* air conditioner per apartment does the complete job of cooling, ventilating, and filtering the fresh air taken in.

General Electric *Thinline* air conditioners are available in various models from 5600 to 14,500 BTU capacity.* There's one just right for your cooling needs.

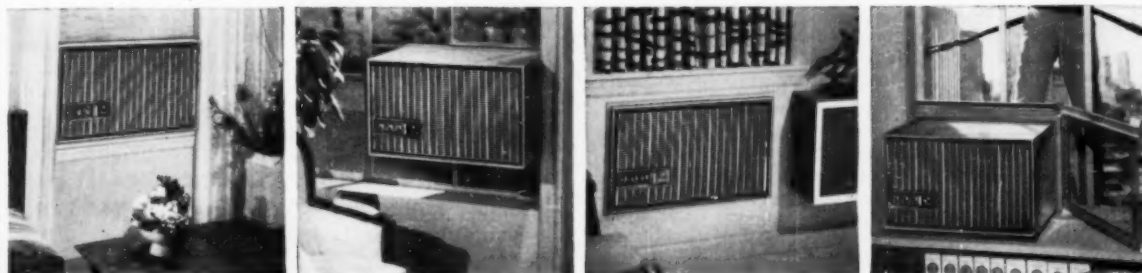
Whether yours is a new or existing building, why not look into the advantages of air conditioning with *Thinline* units. Your General Electric distributor has full details. General Electric Co., Appliance Park, Louisville 1, Ky.

*Cooling capacities are tested and rated in compliance with ARI (Air Conditioning and Refrigeration Institute) Standard 110-58 and are stated in BTU's (British Thermal Units).

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Streaking through the air faster than speed of sound, the B-58 Hustler depends upon nickel-containing stainless steel to with-

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At the speed the Hustler flies, heat from air friction is a problem.

Where this heat is amplified by heat from the powerful jet engines, the plane's skin could overheat dangerously . . . lose strength.

Convair engineers overcome this by cladding portions of the Hustler exposed to the exhaust blast with "honeycomb sandwich" panels made of a special nickel-containing stainless steel. Thin ribbons of stainless steel are formed into a honeycomb shape which is then sandwiched between two thin sheets of stainless steel.

They use 17-7PH stainless steel, produced by Armco Steel Corporation, because it has five times the yield strength of low carbon steel, and it retains much of its strength even at 900°F.

17-7PH stainless steel honeycombs provide the high strength, stiffness, and low weight needed by the Hustler as it outspeeds sound, 50,000 feet above the earth.

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Is it a problem that involves heat, cold, corrosion, wear, stresses, fatigue? Or is there some other obstacle? There's better than a fair chance we can help your engineers get off the ground. Or at least work with them to trim the problem down to manageable size. Suggest that they send for a copy of "Stainless Steel in Product Design" and an Inco analysis sheet that will help them define the problem.

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Mergers, Reshuffles, Exits, and Death

Change Top Command at Four Companies

Marc Rojzman, the general manager who has been responsible for much of the new verve at J. I. Case Co., Racine (Wis.) farm machinery makers (BW-Dec.14'57, p101), has been upped from executive vice-president to the presidency. There he will oversee engineering, production, sales, and finance, while former Pres. John T. Brown, now chairman, will concentrate on labor and industrial relations problems. Rojzman had been president of American Tractor Corp. before that company merged with Case in early 1957, and he was considered one of the main reasons Case wanted American.

In other executive appointments:

- Ray R. Eppert, executive vice-president of Burroughs Corp., was made head of the company after the death of Pres. John S. Coleman. Eppert, whose background is primarily in sales, has been with the office equipment maker since 1921, on the board since 1948.

- E. D. Brockett, vice-president of Gulf Oil Corp., was made president of British American Oil Co., Ltd., Canada's second-largest crude producer, in which Gulf owns a majority interest. Brockett will be chief executive officer, succeeding M. S. Berginer, who becomes chairman.

- Thomas E. Millsop, president of National Steel Corp., exited from the chairmanship of the company's Great Lakes Steel Corp. subsidiary, just as he had left the like spot at National's Weirton Steel Div. earlier this spring. Paul Carnahan, former president of Great Lakes, became chairman, and Wilfred D. MacDonnell, National's operations v-p, took over the Great Lakes presidency.

• • •

Penn-Texas "Clean House" Committee

Bars Compromise in Proxy Fight

Management at Penn-Texas Corp., after fending off three threatened proxy fights in the past two months, still is involved in a battle for control at the May 5 meeting.

The one remaining dissident group calls itself the "Clean House" stockholders committee and is headed by New York transportation lawyer Harris J. Klein and steel fabricator and scrap dealer Theodore Blumberg (BW-Mar.15'58,p61), who claims his 88,612 shares make him the largest single P-T holder. The group wants no compromise, promises that if they win, Leopold D. Silberstein "and his crew will be kicked out." Proposals by the Klein-Blumberg group—one freezing the board size at nine members and the other requiring stockholder approval for sale or purchase of subsidiaries—are included on management's proxy ballot, but the company says it will vote against them.

The first P-T compromise late in February appeared

the Alfons Landa-Robert Finkelstein group, giving it four board seats and passing control of company operations from Silberstein to a four-man executive committee. When the dissident faction again threatened a proxy contest, a new compromise dropped from the board three directors generally considered Silberstein men.

A separate faction organized by two Manchester, Conn., lawyers had also threatened a fight, but this group, too, was pacified by an offer to become a stockholders' advisory committee within the company.

• • •

Defense Dept. Asks Strict Accounting

Of Its Contractors' Recruiting Costs

The Defense Dept. is cracking down on the recruitment advertising costs that defense contractors have been charging to the government. Until now, the contractors were allowed to pass on any "reasonable" costs of advertising for engineers and scientists—and Congress has been very unhappy about the vagueness of just what was "reasonable."

The new policy sets no precise rules, but establishes these guide lines for judging the claims on a case-by-case basis:

- The contractor must maintain "effective budget and administrative controls" on his recruitment costs.

- The work force must be kept in line with the order backlog. The government doesn't want to help pay for building up an unneeded manpower pool.

- Employee turnover rates must not be "questionable."

- Salaries and fringe benefits for the new engineers must not be out of line.

- There's to be no pirating of personnel from other defense contractors, or as the Pentagon puts it, no "violation of recruiting ethics."

• • •

The Box Score

It looks as if management has won the proxy fight at Williams-McWilliams Industries, Inc., dredging concern with a meat packing subsidiary (BW-Mar.8'58, p99). After a four-day annual meeting, management announced that it had polled 301,443 votes to the opposition's 270,530. . . . Management beat the dissidents at Bullard Co., Connecticut machine tool makers, too (BW-Feb.15'58,p167). The dissidents held proxies for about one-fifth of the some 600,000 shares voted. . . . And the results at Metal & Thermit Corp. can be chalked up as a management victory. The dissident interests of the Rogers family, who won four of the dozen board seats last year and were battling for control again this go-round (BW-Mar.15'58,p61), ended up with only three seats, but did manage to vote enough preferred stock to block a management proposal to increase capitalization. . . . But the insurgents sometimes do win. Vice-pres. Arnold Hoffman of Mesabi Iron Co. (BW-Apr.19'58,p163) rounded up more votes than management, is the new president of the company, which owns the Minnesota taconite land mined by Reserve Mining Co.



How to "turn" out MONEY for machine tool financing

Financing purchases of new machine tools should be worked out with the same care as the specifications for cutting metal on a lathe. Your money, like your machine, works more efficiently when terms are carefully drawn up to meet your financing needs.

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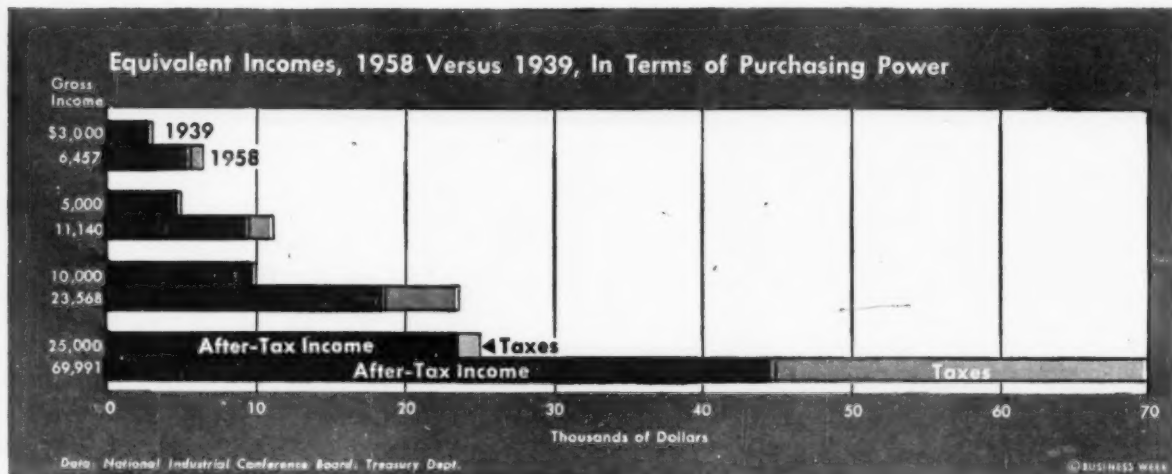
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CHARTS OF THE WEEK



Pay Envelope in Two-Way Squeeze

Since the 1930s, the rising cost of living has shrunk the value of each dollar of after-tax income to approximately half size. And since the wage earner must allocate a much larger share of his gross income to taxes than he did in 1939, he has to more than double his earnings to equal his 1939 purchasing power.

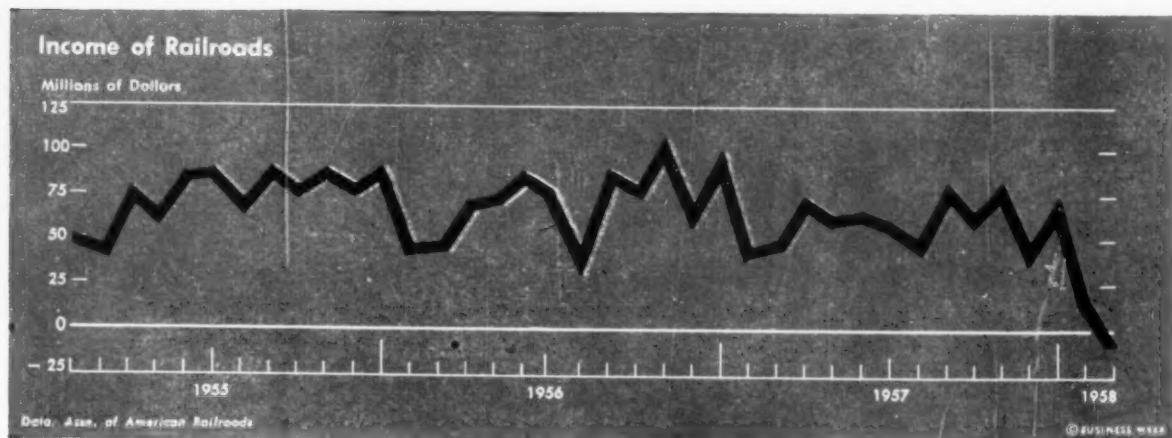
A recent study by the National Industrial Conference Board illustrates

how much 1958 income is needed at various salary levels to break even with 1939.

For example, a married worker with two children, earning \$3,000 in 1939 would have to earn 2.2 times as much today—or \$6,457. In 1939, this man paid \$30 in taxes. His net income was \$2,970. In 1958, a gross income of \$6,457 would leave him \$5,735 after paying income and social security

taxes of \$722. Since \$2,765 of this amount has been lost to inflation, he would be left with the same \$2,970 in purchasing power in terms of 1939.

At the other end of the scale, the \$50,000-a-year man in 1939 would need 3.2 times the gross income today; and the \$100,000-a-year man in 1939 would require 3.6 times as much. His taxes are \$208,546 today compared with \$23,116 in 1939.



The Rails Report February Deficit

Class I railroads reported a \$9-million deficit after interest and rentals for February, according to the Assn. of American Railroads. Net income in January also dropped sharply, to \$17-million. For the first two months, the estimated combined net income was

\$8-million, compared with \$93-million for the corresponding period a year ago.

Eastern Class I roads were specially hard hit. They had a deficit of \$25-million in February, compared with net income of \$17-million in 1957. And

their deficit for the first two months was \$30-million, compared with a net income of \$31-million in 1957.

In the Southern region, net income in February was \$4-million, compared with \$9-million in 1957. For the first two months, it was \$11-million as

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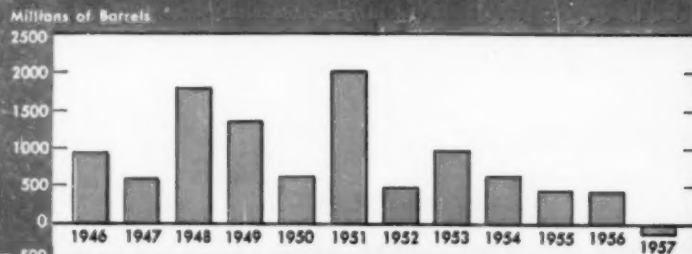
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clues

against \$19-million in 1957. In the Western district, net income in February was down to \$12-million from

\$22-million a year ago, and \$27-million for the first two months versus \$43-million in 1957.

Additions to Proved Reserves of Crude Oil



Data: American Petroleum Institute.

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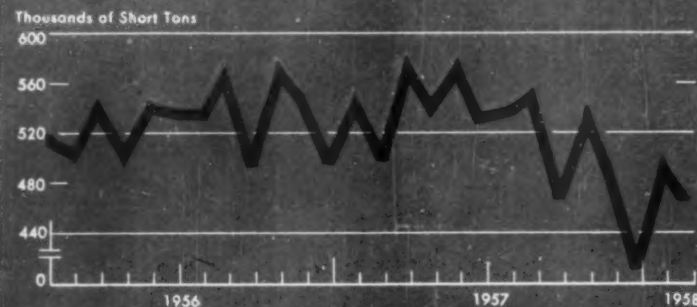
First Slide in Oil Reserves

Last year the seemingly endless rise in crude oil reserves was interrupted. Proved reserves of crude oil in the U.S. dropped to 30.3-billion bbl. as of Dec. 31, 1957—134-million bbl. less than on Dec. 31, 1956. Proved reserves include only oil recoverable under existing economic and operating conditions.

The reason for the decrease is two-

fold: a record 2.6-billion bbl. crude oil production, which more than offset the declining amount of oil added to the nation's reserves. In 1957, 2.4-billion bbl. were added, compared to 3-billion bbl. in 1956. These figures include new oil added through discoveries and through revision of previous estimates.

Canadian Newsprint Production



Data: Newsprint Service Bureau and Newsprint Assn. of Canada.

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Newsprint Cutback Continues

Production of newsprint in Canada, the free world's main supplier, has been falling sharply since last autumn. In January this year it was 10.8% below the year-ago level, in February 8.7% below February, 1957. Consumption in the U.S., the principal importer of Canadian newsprint, has also dropped—and any slump in U.S. demand for an important resource such as this is felt in the Canadian economy (BW—Mar. 29 '58, p. 25). U.S. production,

though it has risen in recent years, still supplies only about one-third of U.S. needs.

Currently the Canadian newsprint operating rate is about 86% of capacity—a drop of about 15% from a year ago. But the decline is not so serious as it might seem—Canadian mills now consider an operating rate of 90% to 95% of capacity to be the optimum rate, and far better than the 100%-102% actual rate of a year ago.

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Prescription for an Expanding Economy

This week's report of the Rockefeller Brothers Fund on the economic future of the U. S. (page 27) may not be quite so dramatic as the earlier study of the defense program (BW—Jan. 11 '58, p144). But it is equally valuable as a guide to the long-term policies that this country should be following.

The panel of economists and businessmen who wrote the report faced up squarely to the fact that the U. S. is in the midst of a recession and that it cannot afford to sit hopelessly and wait for everything to come right by itself. The first part of the report includes a short-term program to arrest the downturn and start business on an upward trend again. The components of this package are as simple as they are sensible; and the fact that they have been suggested before now by other economic experts subtracts nothing from their importance. The prescription, in brief, calls for: aggressive selling by business, accelerated depreciation for new investment, immediate federal tax cuts, short-term public works, easier credit, strengthened unemployment compensation, and establishment of a top-level economic council to guide government action in this area.

All this makes excellent sense. It is the sort of program the U. S. will have to adopt if it wants to deal with the recession promptly and effectively. Conceivably, we could be lucky and get by with something less vigorous. But such reliance on letting nature take its course is trusting blindly to luck. As the Rockefeller panel wisely concludes, it is not the safe course but the risky course.

Looking beyond the current downturn, the panel also rejects the idea that the U. S. should be allowed to drift on into the future without plotting a course or setting up goals. It recommends a deliberate policy of encouraging growth at a higher rate than we have had in the past. As the report points out, the U. S. gross national product grew at a yearly average rate of 3% from 1870 to the end of World War II. In the last 10 years it has grown at the rate of 4% a year. In the future, with proper encouragement, it could expand at the rate of 5%. It is by attaining this growth rate that we can hope to perform the economic miracle of maintaining and improving civilian living standards at the same time that we take the military measures that an adequate defense program demands of us.

It is this emphasis on the necessity of continued healthy growth that makes the Rockefeller report a distinguished document rather than a collection of miscellaneous economic theories. Whether this country realizes it or not, it is committed to economic expansion. There is no other way in which it can hope to discharge the worldwide commitments it has assumed without impoverishing its

people. The Rockefeller Brothers Fund has performed a real service by focusing attention on this simple fact.

The Tax Paradox

In coming out solidly for an immediate tax cut, the Rockefeller panel joins a rapidly growing list of business and economic experts who have decided that this remedy is urgently needed to reverse the recession. Among the other members of the club are the Committee for Economic Development, Dr. Arthur F. Burns, former chairman of the Council of Economic Advisers, and Marriner Eccles, who as chairman of the Federal Reserve Board some years ago was one of the most dedicated foes of inflation.

The odd thing is that congressmen coming back from an Easter vacation among the grassroots report that their constituents don't want a tax cut. And the various public opinion polls that claim to get inside the public's head seem to bear them out.

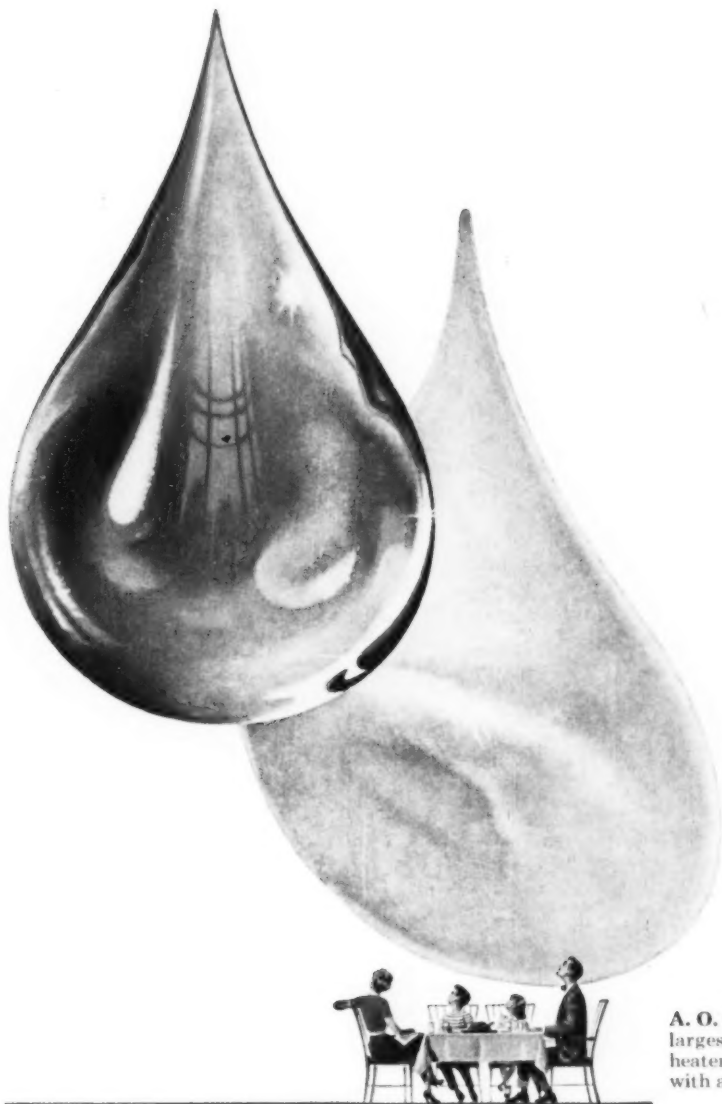
This man-bites-dog twist on the situation would be funny—if it didn't betray a lot of muddled thinking around the country and a general misunderstanding of the part that taxes play in the economy.

One thing that accounts for it is the widespread idea—dating from New Deal days—that government spending is a more effective "pump-primer" than private spending. Thus, you find the same citizen who nobly renounces a tax cut demanding a stepup in public works that will unbalance the budget by just as great an amount. The man who takes this line usually thinks of a tax cut "as only a few dollars in my pocket." He doesn't get around to multiplying the dollars by the number of pockets.

One reason he doesn't is that a lot of people—perhaps a majority—still think of taxes as something that only the rich man pays. Payroll deduction makes the collection so painless for most wage workers that they think of their pay in terms of take-home and forget how much the government takes.

And for 10 years now, these same people have been bombarded with warnings of the perils of inflation and lectures on the therapeutic values of tight money and high taxes. Many of them have silently accepted the conclusions without ever following the arguments.

There is nothing surprising in the fact that they are bewildered. But there is something dangerous. For this country, in the spring of 1958, is not facing an inflation. It is facing a recession. So far, the slump in business has been moderate. But if we are to take effective anti-recession measures, the time is getting short. It would be a real tragedy if we let confused thinking and contradictory advice undermine our purpose now.



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